PROCEEDINGS

ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS

— SEVENTEENTH ANNUAL MEETING—





1949-50 OFFICERS, DIRECTORS AND COMMITTEES OF THE ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS

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OHIO--A. W. Marion, Director, Department of Natural Resources, Columbus

ONTARIO--W. J. K. Harkness, Chief, Division of Fish and Wildlife, Toronto

SOUTH DAKOTA--Elmer Peterson, Director, Department of Game, Fish and Parks, Pierre

WISCONSIN--Ernest F. Swift, Director, Conservation Department, Madison

COMMITTEES

COORDINATION--H. R. Morgan (Chairman), M. O. Steen and H. D. Ruhl

RESOLUTIONS--Leonard Schwartz (Chairman), P. J. Hoffmaster (Director of Michigan Dept.), Chester S. Wilson, Paul T. Gilbert and George E. Sprecher (Asst. Director of Wisconsin Dept.)

NOMINATING--W. J. K. Harkness(Chairman), Dr. Charles Dambach (Chief of Wildlife Division in Ohio), Bruce F. Stiles and C. N. Feast

AUDITING--G. W. Malaher (Chairman), H. R. Morgan and H. P. Cottingham (Director of Fish and Game in Indiana)

About This Publication

These Proceedings, edited by retiring secretary Walter E. Scott, were published in only 100 copies and distributed to visiting delegates, speakers and agencies represented at the annual meeting. If you do not wish to keep this copy for reference, please send it to some library or return it to the Wisconsin Conservation Department, Madison 2, for redistribution.

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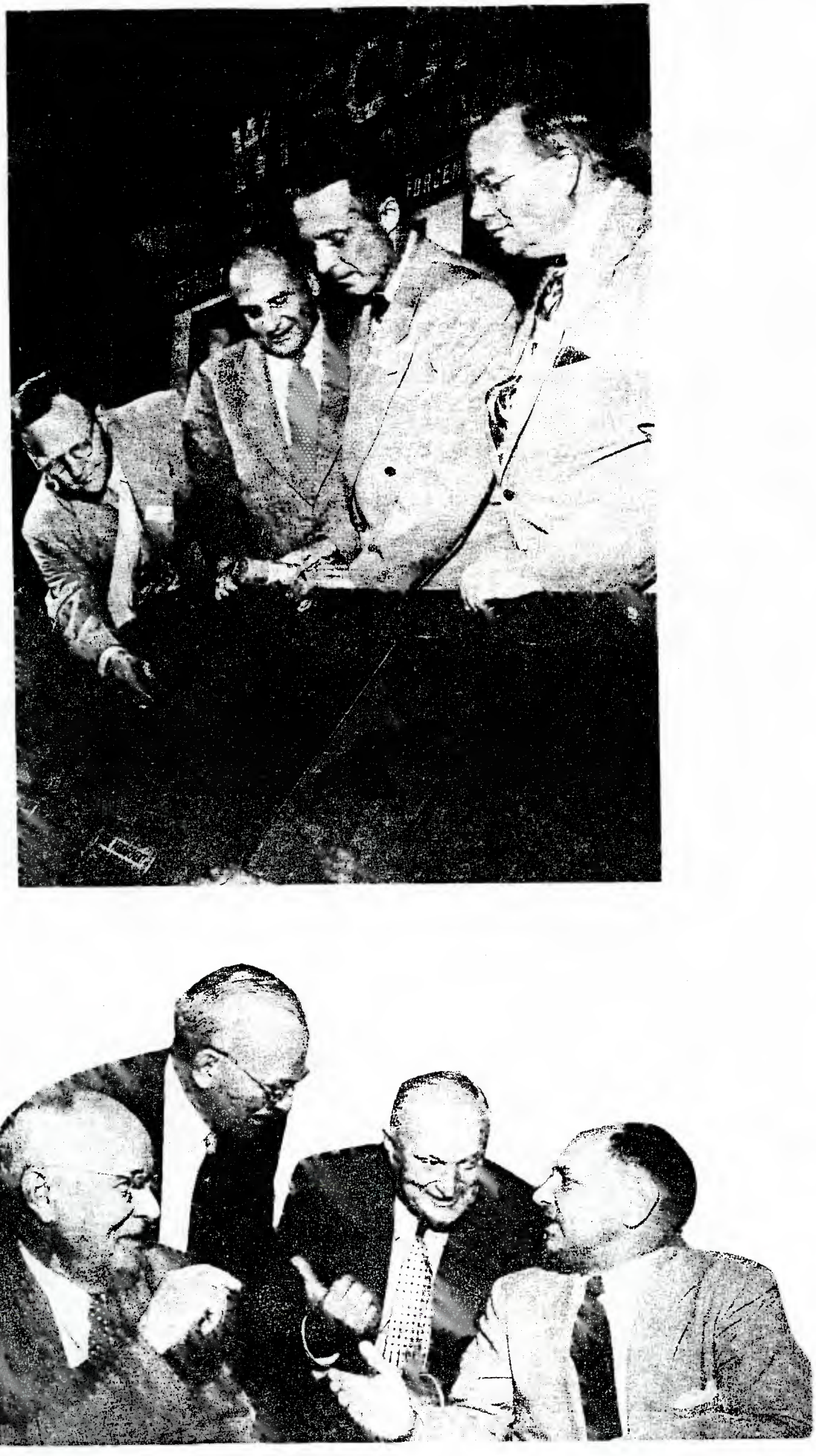


Figure 1: Photos The Milwaukee Sentinel

PERSONS ATTENDING THE MEETING OF THE ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS IN MILWAUKEE - July 24-26, 1950
(194 Registered - 153 at Annual Banquet)
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PHOTOS OPPOSITE PAGE taken at Milwaukee meeting Association of Midwest Fish and Game Commissioners, July 24-26. Top picture, left to right--Wisconsin Director Ernest F. Swift, Missouri Director I. T. Bode, Colorado Director C. N. Feast and Albert M. Day, Chief U. S. Fish and Wildlife Service. Lower picture, left to right--E. V. Willard, Minnesota Deputy Commissioner of Conservation; Oscar H. Johnson, Chief Division of Management U. S. Fish and Wildlife Service; H. W. MacKenzie former director Wisconsin Conservation Department, and Missouri Director I. T. Bode.

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PROCEEDINGS
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
ANNUAL MEETING AT MILWAUKEE, WISCONSIN
July 24-26, 1950

NOTE: Most all speakers and individuals making comments of significance were given an opportunity to correct the stenotype report (prepared by Carney, Viets and Nelson Law Reporting Company of Milwaukee) except in cases of papers read from copy prepared in advance of the meeting.

MONDAY MORNING SESSION, JULY 24, 1950
(General Chairman - President Ernest Swift)

The Morning Session of the 17th Annual Meeting of the Association of Midwest Fish and Game Commissioners, held at the Hotel Wisconsin, Milwaukee, Wisconsin, July 24-26, 1950, convened at nine-thirty o'clock, Mr. Ernest Swift, President, presiding.

PRESIDENT SWIFT: Members of the Association of Midwest Fish and Game Commissioners, delegates, guests and friends: We are now opening the 17th annual meeting of this association. By way of welcome I have asked the Chairman of the Wisconsin Conservation Commission, Mr. Arthur Molstad, to officially greet you on behalf of the Commission. Mr. Molstad. (Applause)

MR. ARTHUR MOLSTAD (Chairman, Wisconsin Conservation Commission): Mr. President, delegates, and guests: Wisconsin Conservation has a great army of friends, and they are friends who have a broad understanding of the problems of conservation, and many of them are leaders of groups which help make our program successful in our state. On behalf of those friends all over Wisconsin, also of my colleagues in the Commission, your President, Ernie Swift and members of the personnel in the department with whom you have so much in common, it is my privilege and pleasure to welcome this convention of Midwest Fish and Game Commissioners to Wisconsin.

Milwaukee, as you known by reputation, is a friendly and sociable city, and it is our hope that you will partake of this hospitality and find enjoyment while here. The people of Wisconsin throughout the years have become accustomed to the greeting and treating of guests from all of your respective states, and I hope that none of them bring back any bad reports. After this convention has adjourned it is our hope, also, that you will linger awhile in Wisconsin, and see those features of this state that make us so proud of it. As you know, southern Wisconsin is highly agricultural. There are prosperous farmers by the thousands, and each curve of the highway will bring to you a rural scene of unsurpassed beauty.

As you travel further north over our highways you will come into the forested areas of Wisconsin, the coniferous and hardwood forests interspersed with farms and thousands of lakes and streams, and it is a refreshing beauty that no one ever forgets. I know the field personnel of the department will be very pleased and flattered if you will stop at some of our fish hatcheries, or climb a fire tower (if you are under forty) and see other features of our conservation program. Under the circumstances such as these, one finds a very powerful urge to forget about all of you people who feel the same way about your own state, but then there is no fun in bragging about your own state to your own people, so we are somewhat frustrated when we speak of our state. We should have more of that power to boast like the southern minister in a speech to his congregation one morning, or a benediction. He had already given thanks to the Lord for all of

of the bountiful things that had befallen his state, and all of those great things that made his state far more superior to anything in the country, and he ended by saying this: "Oh, Lord, we beseech Thee to look kindly down upon all those other poor places where Thy feet have not yet trod." Well, we all probably have that same emotion and feeling, but it is much less articulate, and it is a great thing to be proud of our own state.

There will be discussions here, probably none of them earth-shaking in effect, but nevertheless extremely important because of the cumulative effect on our conservation programs. It is the swapping and exchanging of ideas and experiences, that makes all of our conservation programs more successful and gives us more conservation and better management with more results for the money spent. I think that is something that we owe to the public.

Perhaps after many of these conventions over a great number of years have completed their business, conservation will become more and more an exact science. Probably Al Day and all of the directors here will admit the fact you were born one hundred years too soon, because when our conservation problems are ironed out there will be no more fights, no more arguments, and things will go along very smoothly, and there won't be any fun. It will be a very dull subject, I am afraid. I think I would prefer to have it as is. Nevertheless, we should strive to gain some peak whereby our money will bring to you, and bring to the people of our states, more efficiency. On behalf of all your friends in Wisconsin, again, I welcome you to our state, and we hope that you will enjoy your stay here. If there is anything that you wish, and anything that we can do for you, there is a large number of our boys here at this convention who will be happy to answer your questions, and try to steer you straight. I know that you will have a successful convention. (Applause)

PRESIDENT SWIFT: Thank you, Mr. Molstad.

In view of the fact that the Milwaukee County Conservation Alliance has participated in making this meeting a success, and has been working so closely with the Conservation Department, not only on this project, but so many others, and will continue to try to make your stay here as pleasant as possible, I have asked the president of the Milwaukee County Conservation Alliance to welcome you on behalf of Milwaukee County. I might say that he represents some twenty thousand sportsmen in this particular county. Mr. Larry C. Whiffen, President of the Milwaukee County Conservation Alliance. (Applause)

MR. LARRY C. WHIFFEN (President, Milwaukee County Conservation Alliance): Thank you, Mr. President, and to you delegates and members of the Midwest Fish and Game Commissioners Association, and friends, I certainly extend a hearty welcome to Milwaukee. I don't know whether you fellows realize how important you are to us here in Milwaukee. I think up to the present moment this is probably the most important gathering of conservation minds that Milwaukee has ever experienced. I don't know whether you realize what that means to a community. Well, I am going to tell you something, and that is that one of the problems of the Alliance has been public relations and education. We find it very difficult to carry a real basic conservation concept to the people of Milwaukee or the areas surrounding Milwaukee because it does not lend itself easily to publicity, as you gentlemen know. A meeting of this sort brings in national figures. It brings in you fellows who are doing business on a big scale in your own part of the United States. It means news stories. It means more than that. It means that the people of Milwaukee that read their papers will become conscious over and over again of this word "conservation".

The Alliance is not a sportsmen's league, and I want to emphasize that, gentlemen. We have thirty-one member organizations that are represented by delegates. Maybe the character of our organizations might be of interest to you. We have friends of the soil. We have forestry groups. We have groups that are interested in water, and, of course, we have also the sportsmen's groups. On top of that, we have a number of groups that are civic groups, such as the Kiwanis Club that has set up conservation programs within their organization. We have one of the larger posts here in the city of the veterans' organizations, and I might say this, just to point out what conservation is beginning to mean, that they held a meeting that was called a conservation meeting not long ago, and that particular post had a turn-out of almost 500 members, the largest turn-out for any single meeting they ever had. So conservation is beginning to register in Milwaukee County, and we are awfully happy because of that. We have tried to think of ways and means of carrying this message of conservation--basic conservation--to them constantly. So the Alliance is a cross-section of all conservation concepts.

Mr. Swift said that we represent a fairly large group. We do something else that interests you people, and interests our people, and that is that we pay a great deal of attention to legislative matters, gentlemen, not only at the state level, but we also want to watch the federal legislation as closely as we can. Our interest registers on these legislators. It has been the pleasure of the Milwaukee County Conservation Alliance to work very closely, and with as much power as we could, with the Conservation Department and the Commissioners in getting through good conservation legislation, and blocking poor conservation bills that come up. We look forward to enjoying all that your program has to offer while you are here in the city. We look forward to getting a broader view and a broader education of conservation from your discussion panels, and things you will have to offer to us. We know the press is going to carry much of your material, and we know that is going to reflect back to the people, and they will be benefited greatly by it. So, again, I say that we are overly happy that you came to Milwaukee, and we certainly hope you will enjoy your stay here, and we always look forward to your return here sometime very soon. Thank you. (Applause)

PRESIDENT SWIFT: Before proceeding any further, I would like to call the roll of states. If someone will please answer for them as I read them:

...Roll call of member states--all present.

PRESIDENT SWIFT: Now, there are other groups represented here besides the official members of the organization.

...Introduction here of guests from the U. S. Fish and Wildlife Service, U. S. Forest Service, U. S. Soil Conservation Service, and Izaak Walton League by President Swift who also made several announcements.

PRESIDENT SWIFT: Now, before I call, or start the regular program, I feel, as President, I am justified to make a statement as to the purpose of this meeting, and what way we are heading at this time. It is extremely gratifying to have such a large attendance. Every state in the association is represented. I wish to especially call attention to the fact that our neighboring country to the north, our friend and neighbor, Canada, has representatives from Manitoba and Ontario. Three federal agencies having responsibilities in the preservation and use of our natural resources are represented here. There are delegates from Washington, D. C., to the Colorado Rockies, from the Ohio and Missouri country to Hudson Bay. When I started to develop the program for the 17th annual meeting of the Association of Midwest Fish and Game Commissioners, I little suspected, in fact, I doubt if any of you suspected, that international issues of such grave import would be facing us when we met. My original idea of a program was for this group to discuss and

formulate its thinking toward common objectives of national importance which we of central United States and central Canada could stand for and which we could present to the International Association of Fish and Game Commissioners at Memphis if so desired by you. Conservation problems are no longer confined to county and state boundaries; they are no longer confined to national boundaries; the conservation of resources, renewable and nonrenewable, is today a world problem, and should be the concern of everyone. What action this group wishes to take is for the majority to decide. How we follow through with what we have decided rests in the hands of the majority. No one can deny that there are grave problems, and we shirk our duty if we fail to accept the responsibility of helping solve these problems along with others who have like responsibilities. There is no better time in our history to make ourselves felt nationally. Let us measure up to the job and impress our united ability on those in power, state and national, in demanding sound conservation practices. The time is now.

Ladies and Gentlemen, I cannot help but feel, and I believe all of you realize the seriousness, of the present crisis as it affects our national security. Conservation of our basic resources becomes synonymous with liberty. Old adages in times like these take on a new significance: "Eternal vigilance is the price of liberty." I sincerely hope that certain questions raised in a recent article in the Saturday Evening Post are not true. This article went on to ask if there is not a deficiency of determination beginning to become apparent in the spirit of this nation; the substitution of easy living for pioneer psychology; the weakening virus of less work and more pay; the substitution of collective security for individual initative. Such a statement makes one pause and wonder about the easy life we lead. I maintain that there is truth in the above statement. A strong nation is made up of strong individuals. There is no security in this whole world; there is only opportunity. Unlimited resources corrupted with a wastefulness ever beyond parallel have brought America to this philosophy of easy gains and easy living. Rome prospered and then played more than it worked and finally fell. We are now girding to fight external enemies, but there are internal forces which, to my mind are more insidious and damaging than foreign armies. If we can't halt the decay and overthrow of democratic processes from within, we cannot expect to stop foreign invaders. I say to you that the first law of the world still prevails and that law is a survival of the fittest.

The first discussion this morning is on a subject which affects these freedoms of which I speak. New and strange philosophies are being espoused. Our own tax money is being used to promote them. The right of assembly, of free speech, of franchise is still ours in this blessed United States. To keep it, we must be vigilant. Let us start this meeting with the spirit that we will help save this country. Let us keep in mind it is our job to save basic resources which are the strength and sinew of this nation. That without them we are nothing. If we can save those basic resources, then we can save our nation and save the recreational values which are so dear to the heart of every American. Before I call on the gentleman who is going to give the first paper, I wish to introduce the very able discussion leader who will handle the discussion this morning, Mr. Bruce F. Stiles, Director of the Iowa Conservation Department. Bruce. (Applause) Now, the first subject this morning is the "Report on Federal Legislation and Valley Authorities," and here again I think I picked a man who has a very profound understanding of these matters of the Valley authorities. He has been directly connected and involved, and I think that he can definitely give us some aspects of which we who are not so close to the subject are unaware. At this time I wish to introduce Mr. Bode, Director of the Missouri Conservation Department. Mr. Bode. (Applause)

MR. BODE: After accepting this assignment, I realized that Chester Wilson, by virtue of his work as chairman of the legislative committee for the International Association was in much better position than I was to do the job. I recalled, too, that Cleland Feast just recently has sent out several letters, comments and summaries of legislation, and that much of what I might discuss could easily be duplication.

My first notion was that of preparing a profound treatise on Conservation legislation--past, present and future. It was discarded promptly. There is too much of it. Much is of relatively minor significance. Much is of more or less regional interest.

If then, it is possible to review, or emphasize or bring up-to-date a few of the highlight legislative matters so as to initiate discussion, that is all I can hope to do.

Status of Some of the Vital Pieces of Legislation

Allowances will be made, I hope, if the following summary has become outdated even as I present it, because all of us are aware of the rather hectic congressional situation at this time. If any of you can amend or correct any of it, you are assured herewith that no offense will be taken at your doing so.

The Dingell Bill (H.R. 6533)

The subcommittee reported to the full committee on March 21, 1950. I believe this was the first bill of the second session. The full committee did not report to the House until June 21. The bill passed the House on the consent calendar July 10. The Senate Interstate and Foreign Commerce Committee reported it to the Senate July 12. It is now on the Senate consent calendar which will be called, according to present plans, as soon as debate on the Appropriations Bill is complete. I have the assurance that, if anything should break on this while we are here, I will receive a wire.

Amendments leave allotments to states on the same basis as for P.R. funds, except that allotments to Alaska and certain other possessions are to be made as provided in the Bartlett Bill (H.R. 3906).

Of chief concern, in my opinion, is the manner of administration in the Fish and Wildlife Service. There is strong feeling everywhere I have been that P.R. and Dingell Bill funds and programs should be administered under a single office or branch, not under separate administrations. By all means, this meeting should discuss this matter. Personally, I see no reason why the states should be burdened with all the extra overhead and routine of a separate office.

The Bartlett Bill (H.R. 3906)

This increases allotments of P.R. funds to Alaska to $75,000, funds to Hawaii to $25,000, and provides not less than $10,000 to Puerto Rico and the Virgin Islands.

The bill passed the House on July 10. It was favorably reported by the Senate Interstate and Foreign Commerce Committee on July 12. Its present status on the calendar is the same as the Dingell Bill.

So far as I am able to ascertain there is little or no objection to this amendment. These countries certainly all need the aid proposed and the deduction for the rest of us is negligible.

Release of Accumulated P.R. Funds

No specific legislation has been prepared or introduced. Resolutions favoring release of these funds have been passed twice by the International Association--once on the basis of a release over a five-year period and once on the basis of using the accumulation to stabilize an annual allotment in the appropriation act at $10,000,000 per year by using so much of this surplus as would be needed to make up the difference between the current income from the excise tax and the $10,000,000. Such legislation had a good chance this year, but in spite of resolutions and almost unanimous sentiment favoring release of these funds and in spite of recognized danger of losing them altogether, nothing was done to initiate procedure. Whose fault that is, I do not attempt to say. But I do say that some of us or all of us went to sleep on the job. In my opinion, chance of getting these funds this year is as dead as a door nail. What chances will be next year, I presume the international situation will largely determine. Since the same thing nearly happened to the Dingell Bill and has happened to revision of the Duck Stamp Bill, it seems to me regional associations and the International should discuss this situation, and there should be established specific procedures to avoid such oversight or neglect or whatever you want to call it another time. I have some definite ideas about this. Resolutions are not enough.

Amendment to the Duck Stamp Act

This proposal, you recall, was intended to provide more money for enforcement, which is now limited by virtue of the fact that enforcement is included under the present 10% limitation for administrative purposes. As nearly as I can analyze the situation this legislation fell by the wayside for two principal reasons: (1) wrangling of the states about a formula left those who might have been in a position to initiate steps with nothing to go on; (2) there was strong feeling on the part of the congressmen who would have to take the lead, that, in view of recent amendments made to the act, it would be unwise to go back so soon and ask for more and that it would be much better to try out the present provisions before attempting further changes.

One confidential report to me from Washington, D. C., contained the information that "a hard core of resistance from Colorado to the Chairman of the Senate Interstate and Foreign Commerce Committee sabotaged the senators in this for the time being." There was no indication what the source of this resistance was; so I want it clearly understood that I am bringing this report to you, not in any sense as pointing a finger at the director in Colorado or anyone else. He undoubtedly has as much trouble as any of the rest of us have with militant groups who give little consideration to the importance of coordination. My sole purpose in citing this is the emphasize what I have just tried to impress upon you; that we are certainly ineffective when we get to pulling in different directions and that, if such has happened, it hardly seems fair that one group should overrule the thinking of all of the states as agreed to by resolution. I hope you will view these comments in that light.

I feel sure, therefore, that this proposal is dead for the present year. It should not, however, be forgotten. Three matters need discussion and sane thinking: (1) the wisdom of pressing for any further changes at all; (2) the proposal to include under the wildfowl hunting stamp all migratory birds, which would cover doves; (3) a formula for enforcement funds that we can all agree to.

The Lemke Bill or
Alaska Veterans Homestead Act (H.R. 4424)

This legislation provides that war veterans may file on parcels of National Forest land in Alaska up to 2,560 acres. To me this has all the earmarks of another "landgrab" measure. Conditions in Alaska are such that it is doubtful if any but a handful of veterans could ever prove out on their holdings. It doesn't take much imagination to picture the subsequent consolidation of timber and other areas into large private-interest holdings. A resolution has been introduced opposing this bill.

The bill passed the House with the minority pointing out that sustained yield of forests was not adequately protected. The majority said they understood this but that the Senate would correct it. The bill was referred to the Senate Interior and Insular Affairs Committee and is pending without any action.

The Bald Eagle Bill (S. 1901 - Sen. Ed Johnson, Colorado)
(H.R. 5507 - Homer Angell, Oregon)

This provides the same protection for the bald eagle in Alaska that it now has in the other states. It deserves support. It is thoroughly inconsistent to give this great bird protection in the United States and permit its slaughter in Alaska.

H.R. 5507 was favorably reported to the House June 26 and passed July 10. It is still pending in the Senate Interstate and Foreign Commerce Committee.

The Bonner Bill (H.R. 7209)

(Combines several previous bills of similar nature) The former bills were limited in area covered. The present bill covers Atlantic coast sports fishes and some commercial fisheries.

It provides for studies of the marine fishes of the east coast and I believe the Fish and Wildlife Service and the Wildlife Institute consider this important. It passed the House July 10 and is now pending in the Senate Interstate and Foreign Commerce Committee.

Subsidy for Commercial Fisheries (S. 3680 - Warren Magnuson)
(H.R. 8692 - Henry Jackson)
(H.R. 8693 - Hugh Mitchell)

The bill was referred to the Senate Interstate and Foreign Commerce Committee and the House Banking and Currency Committee. No action has been taken and these bills are all pending in committees.

The Hagen Bill (H.R. 2648 - Harold Hagen, Minnesota)

This bill establishes a Fish and Wildlife Advisory Board. The House sub-committee held hearings March 16 but did not report the bill out. It is still pending in committee.

The Peterson Bill (H.R. 2821)

This provides that the Secretary of the Interior may dispose of any public lands to a state, territory, county, municipality.

Its purpose probably is to permit handling of certain nuisance lands and to work for efficency in land units, but it is so written that it could be badly abused, and many of our national parks and other important public lands could be

badly emasculated. The bill passed the House in April 1949 but no action to date in the Senate.

H.R. 8663 (Cecil White of California) and
S. 3657 (Sen. Paul Douglas of Illinois)

Proposes to consolidate the work of the Army Engineers and the Reclamation Service within a Water Resources Agency in the Department of the Interior. It follows the general plan of the report of the Hoover Commission for a board of impartial analysis and review. I believe no hearings or actions have been taken.

I believe Mr. Day, chief of the Fish and Wildlife Service, plans to discuss the Hagen Bill and these bills and so I pass them over without further comment.

H.R. 2298 (Ralph Harvey of Indiana)

Proposes the use of free licenses in allotting of P.R. funds.

While we all appreciate the difficulty a few states find themselves in over having these free licenses forced upon them, nevertheless, in my opinion, a measure such as this one would open the door and encourage the states to a free for all race to establish free licenses so as to boost their P.R. allotments. The net repercussions would be fatal to many parts of state programs not even connected with P.R.

Hearings were held in the sub-committee May 12. It was not reported out by the committee where it is still pending.

The Dinasour Monument Dam Bills (S. 3839 - Sen. Elbert Thomas, Utah)
(H.R. 8980 - Walter Granger, Utah)
(H.R. 9014 - Reva Bosone, Utah)

Authorize a number of dams, including the Echo Park dam, to be built in the Dinasour National Monument. Its import lies not in the size of the monument, but in the precedent established for starting invasion of these public areas. In this case the Secretary of the Interior has endorsed one of the dams. I understand "he couldn't help himself"--whatever that means.

The bills at present rest in committees, pending action.

H.R. 4469 - Roy Wier, Minnesota
H.R. 4474 - Harold Hagen, Minnesota
H.R. 4481 - H. Carl Anderson, Minnesota

These bills are to withhold P.R. funds from states with discriminatory nonresident licenses.

No hearings held by the committees and the bills are pending there.

No one condones a squabble between states over recriminatory measures against each other because of things they don't like about the other state's laws and regulations. But, to attempt to solve such a problem by legislation as proposed would only create greater confusion. When are licenses discriminatory? Who is to decide it? We might, however, taken warning again of the importance of coordinated effort between states; otherwise we can easily find ourselves saddled with mandates that none of us want.

There is almost no end to the number of bills both bad and good that might be discussed. But there certainly is an end to the time I can spend here doing so, to my ability to do it, and to your patience in listening. The foregoing seem to be some of the highlights.

Valley Authorities

There are three proposals that should be mentioned.

1. S. 1645, known as the Columbia Valley Authority Bill.

2. S. 1160, the Missouri Valley Authority Bill.

3. H.R. 894, The Rankin Bill, which provides for:

   (a) An Atlantic Seabord Authority;
   (b) A Great Lakes-Ohio Valley Authority;
   (c) A Tennessee Valley Authority;
   (d) A Missouri Valley Authority;
   (e) An Arkansas Valley Authority;
   (f) A Southwestern Authority;
   (g) A Columbia Valley Authority;
   (h) A California Authority; and
   (i) A Colorado Valley Authority.

The first two bills above set up "authorities" under control of a board of full-time directors; the third (The Rankin Bill) sets up nine authorities, each of which "shall be directed and controlled by a single administrator appointed by the President by and with the advice of the Senate, except the Tennessee Valley Authority" which continues as is. The director shall report to the President as the President may direct. The authorities are subject to the supervision of the President. The President may advise with a council of Director of the Budget, Chairman of the National Resources Committee and others from other departments designated by the President himself. He does not have to do so. The President may transfer from any department or agency of the United States to an authority the control and operation of any dam or works together with unexpended moneys. The authorities may make recommendations to states for such legislation as they deem advisable. These few citations will give you some idea of the far-reaching nature of the proposals. The Rankin Bill goes farther than any of the others in establishing complete one-man government in the United States.

It is my best information that such a broad and bold plan as the Rankin Bill will not get much audience, but the strategy of the "authority" proponents seems to be to tackle the job one region at a time. While other authority bills do not provide for autocracy quite so boldly as the Rankin Bill does, they do, by virtue of their right of seizure, their mandate to "advise and assist and recommend" with regard to all the economy and social welfare of the people, their potential control over all power whether private or public and their right to take over all sorts of interests and activities, give a pretty gloomy picture to what will be left of state control.

I am willing to discuss details of these plans at any length this group wishes, but for the purposes of this presentation I must assume you are familiar with those details.

The Columbia and Missouri Valley Authority bills are probably dead but, in my opinion, only for the time being.

There are two new developments that must be considered in connection with Valley Authority thinking. One is the provision carried in the omnibus appropriation act and sponsored by Sen. Kerr of Oklahoma. This sets up an Arkansas-White-Red River federal interagency committee to make studies and draw up comprehensive overall water and resources development plans for those watersheds. It is supposed to be patterned after the Missouri Valley Interagency Committee. It apparently is an attempt to counteract the Valley Authority movement. The Army Engineers dominate the scene to the extent that they are designated to "chairman" the program. The plan was not agreeable to the President but he did not veto it because it would have necessitated vetoing the whole omnibus appropriation bill. He did, however, comment pointedly on its undesirability. These comments leave one with the distinct impression that the President favors Valley Authorities. S. 3707 sets up a New England-New York Resources Survey Commission for the New England States and New York. This has all the appearances of a back door approach to a Valley Authority. It seems to lift the survey and plan provisions out of the usual authority bills, as much as to say, "let's take this step first."

Whether these last moves will result in the states having any more to say about water developments than they have had in the past remains to be seen. The first organization meeting of the Arkansas-White-Red River Committee has just been called.

The broader concept of the Valley Authority approach is undoubtedly the sound approach to comprehensive resource conservation, if we could find a way to eliminate the dangerous autonomy involved and give the states their proper place in planning and control and maintain state democratic processes unhampered. The Missouri Interagency accomplishment is probably the nearest we have come to this as yet. The trouble is this came too late and exists too much by virtue of sufferance on the part of the Army Engineers. There is some question as to whether it would ever have been possible if it had not been for the three-way Army Engineer-Reclamation Service-Valley Authority squabble.

I am neither advocating nor opposing the valley authority idea. It has many good points. But I am frank to admit that I shake in my boots over the ultimate prospects of maintaining any semblance of state rights in wildlife or even government under some of the provisions of the proposals made to date.

WEAKNESSES AND NEEDS IN OUR LEGISLATIVE PROGRAM

Riding Herd:

It is not difficult to understand how, in an organization such as this or even the International Association "everybody's business becomes nobody's business." Nevertheless, when Congress has before it an avalanche of bills running over 10,000 and some 1,000 or more are conservation measures, it is going to take herd-riding to get any attention. Our experience this year with the Dingell Bill, the accumulation of Pittman-Robertson funds and possibly the revisions to the Duck Stamp Act are pointed examples of this need. For some years I have maintained that our interests require the services of an executive secretary who can do this job. That will take money, but the work of follow through on legislation is becoming a man-sized job. I would like to see this organization discuss this problem.

Destroying "Pork Barrel" Psychology:

The "Pork Barrel" mania does not originate with the Congress or even with the various governmental agencies, although it certainly is capitalized on by many of them, and certain ones have become masters in the art of fostering it.

Its origin lies in the grass roots--ambitious chambers of commerce and civic groups, citizens' organizations back home, patronage seekers and dispensers. We are all afraid we will not get our share of the gravy. For example, the House appropriation for rivers and harbors is substantially reduced, but before the omnibus bill gets through the mill in the Senate and Conference committee it comes out with larger appropriations than ever. We pay subsidies and adopt many other devices to discourage over-production but turn around and clamor for huge sums to bring more land into production. This could not happen if the people themselves didn't hammer their congressmen for their share and more of it.

Unification of our own thinking:

I have cited enough instances in the foregoing to make clear the fatalities of divided effort. We must get beyond our own state and region in these broader issues. There never was a time when we needed more to think alike.

Declaration of National Policies:

Anyone who went through the agonies of attempting to develop a national policy statement of interpretation of laws pertaining to wildlife efforts by the Army Engineers and the Reclamation Service the past three years knows what I am talking about. Ask Harrel Mosbaugh; he toiled and sweat and agonized to bring about a memorandum of understanding between the states of the Missouri Valley and the Army Engineers, and also with the Reclamation Service. These states owe him a debt of gratitude. A sort of "weak-kneed" agreement was finally completed with the Army Engineers. The proposed memorandum of understanding with the Reclamation Service is still pending. After this memorandum was agreed to by all the states and the regional offices of the Reclamation Service, it went to Washington. Someone there, who I am certain had no acquaintance whatever with field conditions and who certainly missed the whole conception of what the states were trying to accomplish, sent back a supplement. This supplement practically nullifies the original understanding, and in my opinion makes a cryptic attempt to commit the states to things even beyond the coordination act. I for one can never sign the proposed "clarifying" supplement.

I have reached the conclusion that it is the considered strategy of some of these agencies to refuse to commit themselves to a definite policy and to keep the forces of the states divided. They can hammer us over the ears and beat us down and thumb their noses at us with much greater gusto separately than if we all got together and started fighting for what really belongs to us. With great finality we were told that there was no need for such memoranda of understanding, because the law was adequate. The law was adequate, if followed out as Congress intended but, in our state, for example, we have to deal with eight district engineers' offices and there is no one of them that interprets the application of the law in the same way.

What with wildlife branches being established separately by the Army Engineers, the Reclamation Service, the Forest Service, the Fish and Wildlife Service, Valley Authorities, National Park Service--most, but not all of whom, hold the viewpoint that when they acquire lands they become an autonomous state and are in no way subject to state control--it behooves the states to consider how much they have or will have left. I believe that Pittman-Robertson has demonstrated clearly that states can be aided without the necessity of domination and control.

I am not so sure but that I am becoming a strong advocate for a unified national conservation agency that will have complete jurisdiction over all of the natural resource work. I have not always felt so. Is this tendency toward federal domination a coming need for our nation or is it our own false evaluation of what we are getting for nothing that drives us to sell our souls? I do think that much of it is the result of the failure on the part of the states to get the job done, both separately and in groups together. In many cases skillful federal guidance or manipulation has kept the states and the people within states divided against themselves. The field is thus all set for a federal agency to step in, mediate the wrangling, and take charge of bringing order out of chaos. Maybe our country has reached the stage where this has to be. We better think about it.

THERE IS SOME SUNSHINE

As I reviewed the foregoing remarks I became aware that they were rather pessimistic, but I can assure you that I have enthusiasm over the progress that has been made in the wildlife field in the last 15 to 20 years. I am not going to attempt a review of progress, but you need only to look at a list of some of the steps accomplished to feel much encouragement.

LEGISLATION:

MIGRATORY BIRD TREATY WITH CANADA--Ratified December, 1916. Implemented by Migratory Bird Treaty Act of 1918
MIGRATORY BIRD TREATY WITH MEXICO--1937
LACEY ACT--1900
PITTMAN-ROBERTSON ACT (Federal Aid in Wildlife Restoration--50 Stat. 917)--Sept. 2, 1937
FLOOD CONTROL ACT OF 1936
FLOOD CONTROL ACT OF 1944--Public Law 534, December 22, 1944
THE COORDINATION ACT--Public Law 732, August 14, 1946
FEDERAL RECLAMATION ACT--1902
WEEKS LAW--1911
CLARK-McNARY ACT--June 7, 1924 (43 Stat. 663), and amended 1949
NORRIS-DOXEY ACT--1937
POLLUTION LAW--Public Law 845, 80th Congress

AGENCIES CREATED:

COOPERATIVE WILDLIFE RESEARCH UNITS--1935
SOIL CONSERVATION SERVICE--1935
DIVISION OF FORESTRY--1898
FISH AND WILDLIFE SERVICE--June 2, 1940
CIVILIAN CONSERVATION CORPS--1933
AGRICULTURAL EXTENSION SERVICE--1914--Created by the Smith-Lever Law
FIRST NORTH AMERICAN WILDLIFE CONFERENCE--1936

And now, if you are not worn out listening to this very dry and jumbled presentation you ought to be, and I ought to quit. In trying to gather together something that might bring us up-to-date in legislative matters I realized that I should have quit before I accepted the assignment because I am not qualified to do justice. Nevertheless, if these remarks will induce you to disagree, or question, or discuss the problem, they may have served their purpose. (Applause)

MR. BRUCE F. STILES: I am sure that you will all agree that Mr. Bode has covered national legislature and valley authorities in a very thorough and masterful way.

It is apparent from the amount of time allotted for this discussion period that our President, Ernie Swift, and those who have assisted him in arranging this program, considered this discussion period to be one of great importance, and I believe that it is. I believe that out of this discussion period should come the unified expression of this group as to their stand on various legislative matters. Probably the Resolutions Committee should draw much of their material, and especially the material on legislation and valley authorities from what comes out of this discussion.

There is one little advantage that a person always gets in being on the program, and that is to have the opportunity to accept a compliment now and then. Ernie Swift referred to me as a capable discussion leader. As he said that, there came to me very forcefully the importance of national legislation and of valley authorities, and I couldn't help but think of the job of a state employee, or administrator for the federal department, but especially of the state. I know that each one of you have your own job, as I do, and that there is a heavy load upon your time, and you must determine what you will spend your time on, and what you will not. We are very busy in what we consider a big conservation program, and I have spent a lot of time working on the program in Iowa, but still I feel that I have been derelict in my duty, not having spent enough time in considering federal legislation, especially such far-reaching legislation as the valley authority bills. For that reason I feel quite inadequate to carry on this discussion, or lead the discussion in an intelligent manner.

When I think of the various agencies that are created, such as the Missouri Valley Inter-agency Committee, the Missouri State Committee; the Federal Interagency Committee, the far reaching organization of the Army Engineers, of the Bureau of Reclamation, of the ten thousand bills Mr. Bode spoke of that were introduced in the last congress, of the thousand bills that deal with conservation, I am sure that a much larger portion of my time should have been devoted to consideration of national legislation. I think we are all prone to be selfish. We are prone to spend more time on the things that we are more intimately associated with, and the things from which we can see immediate benefits, and I think of the Dingell Bill. I am sure I have spent much more time considering the Dingell Bill than I have of the Valley Authority bills. The Dingell Bill is very important to us. We all want it, and it looks now as though we are going to get it. I am also sure that from a long-range standpoint it is of comparative importance when compared to such bills as the White Bill, which I believe is No. 8663. That is the bill, of course, which proposes a consolidation of the Army engineers and Bureau of Reclamation service. That is a bill that comes out of the recommendations of the Hoover Committee on reorganization of committees.

Reorganization of the government may not be immediately associated with the conservation of your resources, but certainly indirectly it is very closely associated with it, and I personally consider this one of the most important bills that we will have to discuss.

Now, what we get out of this discussion is entirely up to you. I hope that all of you will participate in it. I am now going to throw the meeting open for discussion of any of these bills.

MR. C. N. FEAST (Director of Colorado Game and Fish Department): Mr. Stiles; I am flattered to learn of Colorado's influence, but I hesitate in accepting the responsibility of sabotage.

Mr. Bode, I want to compliment you on that presentation, but I feel that I have to go a little farther.

First I want to speak of the so-called Duck Stamp Bill, and to clarify any misapprehension that may exist on sabotage. In that connection I would like to call to your attention that Senator Johnson of Colorado is chairman of the Senate Inter-state and Foreign Relations Committee. He has probably extended his influence in getting senate action of the Dingell Bill and Alaskan PR Bill as hard and efficiently as any man in the senate, and I would presume by virtue of his influence in that respect, he may have equal influence in other respects.

I think the Duck Stamp Bill was mishandled in the first place. The first thing I had to do with it was when our very able president appointed me--requested me to resume the responsibility of assuming his responsibilities in handling the affairs of the United States as president of the international association.

The first I heard of the proposed Duck Stamp change was a very short unexplanatory letter I received from the American Waterfowl Committee, which is presumed to be the official adviser of our Federal Wildlife Service. Acting in my capacity, under the instructions of our President Lewis, I wrote to each state and gave them all of the information I received from the letter I had received from the American Waterfowl Committee. Unfortunately only 26 states of the 48 answered my letter; and there is a point I want to emphasize. Unity requires unanimous action.

Mr. Rider at that time was chairman of the Executive Committee. Mr. Rider and I spent one whole day analyzing the answers we received from the letters we sent out on the proposed Duck Stamp changes--by the way, in the letter that we received, it didn't say who was even proposing the change, or who was behind it. According to our tally, that we could gain as near as possible, it showed that half of those states answering the letter sent out were opposed to the proposal, and half of them were in favor of it.

When we met on the Executive Committee there were only two members of the Executive Committee in attendance, besides myself and the Chairman of the Executive Committee. We had to act without authority, and it was our belief that there wasn't sufficient information presented in the notice that we received of the Duck Stamp change, so we requested of the U. S. Fish and Wildlife Service to submit to the states their reason why they wanted the change so that the states could have something to intelligently act upon.

They did that. Last March when we met at the American Wildlife conference I, as chairman of the Legislative Committee of the Western association, called the full committee into its separate session and explained to them the circular that had been sent out by the Fish and Wildlife Service. The Western association at that meeting unanimously opposed the change in the Duck Stamp.

By virtue of my instructions, the action of the Western association was brought to the attention of the Legislative Committee.

Now, I have always been a believer in united action as to the strength of the international organizations. I believe that if we take any action, it should be taken on a unanimous basis, and if there isn't unanimity in that action, it should be tabled. That is our strength, everybody working for the same thing.

So I carried that back to the Western association that same day, and we met again that afternoon in the Executive Committee of International, and when I walked back into that Executive Committee of International, I carried with me a unanimous vote from the Western association in favor of the measure.

Now, I believe that the blame can lie, Mr. Bode, on the manner and means in which it was originally presented. The International Association did not know much about it, and neither did the Executive Committee. I most certainly did not, and neither did the several states, as I could well see when I met with them.

Now, at the present time the Western association has gone on record as in favor. Our action was to eliminate all earmarks and turn expenditures and decisions of expenditures over to the Fish and Wildlife Service, which apparently did not meet with the approval of the other associations.

So we agreed then in the Executive Committee to support a measure that would allow the Fish and Wildlife Service the full control of the expenditure of the Duck Stamp money, with the exception that not more than 10 per cent, which is to be spent for the purpose of administration; and I think that is good legislation and good action.

I want to further state that problems of this character is one reason why I asked to become a member of the Midwest association.

Colorado lies at the top of the continental divide. The western part of the state is western. The eastern part of the state is mid-western. So Colorado becomes in a position of being in conflict unless she is a member and knows what is going on in both organizations.

Now, Mr. Bode, your suggestion merits value as to extending our influence in the general field of international legislation, especially national legislation; but there again I can't help but still be just a little bit dissolutioned. I have had that burden the last year, by virtue of the fact that our president is a Canadian, of carrying on the burdens. You may say I am a quasi president of the association as far as the United States is concerned. I have found that it has taken a tremendous amount of my time, to the point where I am afraid that I could be accused of neglecting some of my local responsibilities; but nevertheless I felt I owed the association a responsibility, and I did my best to assume that responsibility.

Now, when we deal in matters of national interest that have their effects on local interests, I believe that it is our responsibility to get all the facts. Now, when it comes to the problem of the Echo Park Dam in the Dinosaur National Park, all of the facts have not been presented to the public.

The facts of the case are that from the Rocky Mountains, the tops of the Rocky Mountains, west, that is the great American desert, every bit of industry, every bit of social and economic development out in that part has come as a result of the development of our water. Without water out there we could not exist. Most of your economic development has come as a result of developing that water, even to the point of where a state has become divided among itself, like the State of Colorado. The western part of the State of Colorado has more

water than it needs to meet its immediate demands. The eastern part of the State of Colorado does not have enough water to meet its immediate demands. It calls for a division, a share in that water.

The State of California is considering long-range programs to bring water to their cities, water from long distances. Our Supreme Court of the United States says that the states can get together and form a compact, and if that compact is adopted by the United States Government, and ratified by the various states, that compact shall become effective, and it is valid and legal. Now, take the states of Colorado and California which met together, they formed a compact on the Colorado River, and that compact bears the earmarks of law, and is upheld by the Supreme Court of the United States, and in accordance with that compact the upper states on the Colorado basin get 51 per cent of the water, and the lower states of the basin get 49 per cent, and under the terms of that compact it makes it mandatory and incumbent upon those states to use it.

Most of the water that we need in the State of Colorado is on the western slope, and by virtue of that, there must be compensatory projects. There must be projects initiated which will guarantee and satisfy existing rights.

Now, there is another side of that Dinosaur problem. The basic fundamental of a national park is that it shall be kept in its primitive state, but, gentlemen, a lot of those national parks in the western part of the United States are not being kept in their primitive state.

We have one in Colorado that has been eaten up by the elk, and a greater per cent of the vegetation destroyed, and there is nothing that we can do about it, except go in there with game wardens and rangers and do our best to kill off a little of the surplus; and the facts of the case are, we just completed a survey on the Dinosaur Monument, and the forage utilization on the Monument is considered destructive, that is, all of the available browse and plant covering is being destroyed by game.

Now, I am not going to take an issue in this case either for or against the Dinosaur Monument Park, but I do believe that on any of the issues that we take, and any of the stands that we take, we will succeed by one thing only, and that is a full and complete knowledge of all of the facts, and acting accordingly, and acting unanimously.

I want to bring this out--that by virtue of the condition that Mr. Bode has brought to your attention, this next International Association meeting is going to be extremely important. Now, let us not have the situation like we had last year when only half of the states were represented at that meeting, and this half being required to assume responsibility without instructions or without knowledge of the wishes of the other states.

Thank you for taking so much of your time, Mr. Chairman. (Applause)

MR. STILES: Thank you, Mr. Feast.

Well, this discussion dealt with two bills, the Dinosaur Monument Bill and the Duck Stamp Bill. Just as a matter of clarification, there are those here who are not familiar with the Duck Stamp Bill, and I would like to have Mr. Bode correct me on this, if I am wrong: The Duck Stamp Bill was the bill that proposed to earmark 25 per cent of the funds for administration by the Fish and Wildlife Service. The law enforcement section in the Fish and Wildlife Service is in the administrative division, and it is apparent that our congress will always look with disfavor upon any bill which presumes to earmark more than 10 per cent for administration. Probably one of the reasons

that we lost the opportunity to get this bill through was that it was not presented in the proper manner. Probably the thing to have done would have been to take law enforcement out of the administrative section. Is there more discussion on either of these two bills? Al Day.

MR. ALBERT M. DAY (Director, U. S. Fish and Wildlife Service, Washington, D. C.): Mr. Chairman, I should like to clarify a few points that have come in connection with this discussion on the Duck Stamp Bill.

As your chairman has stated, the bill as it now stands provides that not more than 10 per cent of the receipts may be used for administration, which includes law enforcement. At the time that the original amendment to the Duck Stamp Act was under consideration, and I see some of my friends over here at the press table, Gordon MacQuarrie, and some of the others who are responsible for having introduced the first bill that would look toward the raising of the Duck Stamp price from $1.00 to $2.00, that bill included the provision for increasing the authorization to 25% as well as opening of certain portions of refuges after they have become developed. The latter was quite controversial, and there were many people who thought it unwise to open any portion of the refuges. We had long hearings on that subject. On the other hand there was a tremendous amount of interest in increasing the 10 per cent to 25 per cent to permit more for law enforcement. In fact, it was largely the drive for more and better law enforcement that carried the bill through to enactment raising the stamp to $2.00.

Before the original bill was introduced there were long discussions with the American Waterfowl Committee, made up of representatives of all major conservation groups in the country as to whether the 10% limitation should be completely erased thus permitting the Fish and Wildlife Service to use its own discretion. I personally favored that, but after long discussion it was decided best for the sake of getting it through Congress, to set some limitation, so the 25 per cent was agreed upon.

That was fully approved by the International before the bill was introduced. The history of the voting of the International was in favor of the opening of refuges, and increasing the enforcement limitation from 10% to 25%.

A year ago when the Duck Stamp Bill passed the House, it included the 25 per cent clause. When it came up on the floor of the Senate, someone raised the question as to whether 25 per cent was too much for administration. The people who were handling the bill agreed (without making the case for enforcement) to eliminate the 25% and strike it back to 10 per cent for administration and enforcement.

I was in Denver at the time this occurred. There were only a few days left of that session of the congress. The boys asked me whether we should try and have the Conference Committee between the House and Senate restore the 25 per cent or to attempt to induce them to recede. I used my own judgment, which may or may not have been good but I said, "No, it is too important that we get the $2.00 increase, and that we get the provision for opening the refuges, and we will go back next year and see if we can get the 25 per cent through." So the bill was passed on that basis. It was my understanding that there was full accord on the part of the International through previous actions and that there was no objection to raising the 10% limitation to 25 per cent. I think the record will bear me out on that.

This year the people interested in the enforcement increase planned to go back and try to get such a bill introduced. It was Mr. J. Hammond Brown of the Outdoor Writers and Secretary of the Advisory Board of the American Waterfowl Committee who publicly proposed such a move. We assumed, perhaps wrongly, that since this had been previously discussed, and was fully agreed upon by all parties, that there would be no objection to it. Objection did arise in the western states, however. The Western association took the action in San Francisco previously mentioned. They finally agreed to an entirely new provision, which could eliminate any ceiling whatsoever and would permit the Fish and Wildlife Service to use its own judgment. In the meantime there had been hearings in the House and Senate, all centering about the 25 per cent figure. So it seemed by attempting to change the whole discussion after these hearings had been held, it would confuse the people in the Congress who handle your legislation. So long as this controversy had developed it seemed unwise to bring the matter up in a bill this year. The chairmen of the Legislative Committee who would hear the arguments felt the same way, so no action has been taken.

It is unfortunate that this difference of opinion arose as it has held up legislation at a time when additional funds for enforcement are badly needed. While I am still on the floor, I would like to bring you up-to-date on the Dingell Bill, and the amendment to the Pittman-Robertson Act to provide more money for Alaska and the other territories. I called Washington about an hour ago, and it looks as though these two bills may pass the Senate today. There will probably be a calendar call today, and we hope they will be passed; if not, chances are exceedingly good they will pass within the next week.

The new Dingell Bill will not go into effect for another year. One of the reasons it was vetoed last year on advice of the Treasury Department was that it would have accumulated past taxes, and made them available upon the enactment of the bill. The Treasury said they had no way of segregating that tax on fishing tackle, and didn't know how much should be available for authorization. The new bill provides that there shall be a year's accumulation of the receipts which will then be available for authorization and appropriation. That means that if the Dingell Bill is passed now, it will not go into effect until a year from now, but it will give us that time to get our organization pattern lined up, and find out how much the tax will be. We estimated it will be somewhere between three and four million. (Applause)

MR. STILES: Thank you, Mr. Day. Apparently we will have plenty of time to take care of the matters, but I believe as the Dingell Bill is now written, each state will have to prepare legislation, presenting it to their own legislature, so as to get their consent to the provisions of the act in about the same manner that we did in the P.R. Bill. I have gone over the bill that we have in Iowa that gave us assent to the P.R. Bill, and it will not be adequate, as probably true with many of the other states. While we have plenty of time, I might call that to your attention as something that each state will have to do in event the Dingell Bill is passed. Do we have any further discussion on the Duck Stamp Bill? I wonder if Mr. Bode has something further he wants to add to the Duck Stamp Bill?

MR. BODE: Mr. Chairman, I would welcome an opportunity to extend my remarks a little bit. In all fairness to Mr. Feast of Colorado, I hope when I made that report on that one item, I stated that it was the report that came to me from Washington, D. C., and I could not confirm the authenticity of it, but I used it because if that situation were developing it behooves all of us to get together. It was a dangerous thing. Something has happened here that I am very much gratified about. On the report that I made, and on the remarks that Mr. Feast made, my frank opinion is that this only emphasizes the point I tried to bring out; on any of these resolutions, we are not going to get any place, as Mr. Feast said, until, and unless, we get together.

I am grateful that Mr. Feast gave you the detailed report of the hearings and meetings of the Executive Committee, and the work that was done on that Duck Stamp Bill. I hope that you will recall that I said I was not pointing my finger at Mr. Feast or any one particular group, and I did not intend it in that manner.

I agree with Mr. Feast 100 per cent in his remarks about the difficulties we went through in trying to get something on that Duck Stamp Bill. I wanted to bring about, if possible, the kind of discussion we had in the clarification of the standpoint of the State of California that we had in this meeting. I want to emphasize again, as I say Mr. Feast emphasized, without question, the dangers that we run into when we don't get together and get those things ironed out. We should go before Congress with a united front. Personally, I appreciate more than I can say the remarks that Mr. Feast made, and I hope he doesn't consider any remarks that I made as a personal thing, but as an attempt to clarify the situation as it stands. As far as the Dinosaur Echo Park Monument project is concerned, I am still against it. (Applause)

MR. STILES: Thank you, Mr. Bode.

The International Association, of course, has been the organization which has spearheaded our legislative program. However, I am sure that this group should be in a position to secure some unification on their thinking in regard to the Duck Stamp Bill. It may not be proper as discussion leader for me to do this, but nevertheless I would entertain a motion to the effect that the Resolutions Committee be instructed to study the provisions of the Duck Stamp Bill, and bring back to this group a resolution that can be discussed as to what we might present to the International. I will entertain a motion to that effect.

MR. FEAST: Mr. Chairman, I would like to ask Mr. Day a question: Does the action taken by the Executive Committee of the International at the San Francisco meeting agree with the desires of the Fish and Wildlife Service?

MR. DAY: Yes, it meets with the desires of the Fish and Wildlife Service in so far as the fundamental action of the legislation is concerned, but there are very general opinions that that would be most difficult of enactment, that Congress would not be in favor of lifting all restrictions on administration.

MR. FEAST: That carried 10 per cent restrictions.

MR. DAY: The meeting at San Francisco provided that enforcement should be over in the 90 per cent instead of 10 per cent. Well, there has been a tremendous backlog of testimony that has come in from various sources that Congress has centered many discussions around the 25 per cent. I think it would be difficult in hearings to reverse ourself and change to something else. I think the best chance of enactment is through standing by the discussions that have gone on over a period of two or three years, limit it to 25 per cent, and from a practical standpoint you could erase it if you put enforcement in the 90 per cent.

MR. FEAST: Mr. Day, I want to call to the group's attention the fact that plan didn't pass the first time and that was due to objections of certain legislators and Congress to a 25 per cent administration allowance. That seemed to be the misunderstanding. It failed on that point because some of them didn't understand it, and they maintained the 25 per cent administration was too much. Isn't that correct?

MR. DAY: Yes, that is correct. At the last discussion, the bill would have been introduced and would have spelled out enforcement instead of mere administration.

PRESIDENT SWIFT: I would like to relinquish the chair for a moment and take the floor.

MR. STILES: You have the floor.

PRESIDENT SWIFT: In the first place, I am a firm believer in increasing the duck stamp from $1.00 to $2.00. I am a very firm believer in the fact that there should be an increase in federal enforcement, and the only way you can get that is allocating the money to enforcement. I don't agree with a great deal of the information that has gone around, whether state or national saying the 10% is adequate. I received a brochure, if you can call it that, which might make it a misnomer, from one of the midwestern states that stated that law enforcement was adequate, and I think it is nothing more than a digest of a disarranged mind. Personally, I like this idea of dividing administration into the 10 per cent, and throw enforcement into the 90, but at the same time I have had little to do with federal legislation and presume that sometimes when you can't get a meal, you have to take a lunch. We should unify our actions here to get something through and make some advancement. I am not in a position to say that we can overcome this antagonism through putting enforcement in the 90 per cent, but I would like to see this group go on record recommending for the International's consideration of good constructive legislation whereby the Fish and Wildlife Service can have an opportunity for better enforcement. (Applause)

MR. STILES: Thanks, Ernie. I certainly feel as Ernie Swift does, that this group should go on record in some manner on that bill. I would still entertain a motion that the Resolutions Committee be instructed to draw up such a resolution.

A DELEGATE: Mr. Chairman, I would like to so move.

MR. STILES: It has been moved that the Resolutions Committee be instructed to draw up a resolution of recommendation to the International, (to be discussed at the proper time) as to the stand of this group on the Duck Stamp Bill. Is there a second?

A DELEGATE: I will second that.

...The motion was put to a vote and carried...

MR. STILES: I notice that on the program Mr. Day is scheduled to discuss problems of International Waterfowl Management. In Mr. Bode's paper he stated that Mr. Day would discuss the White Bill.

Mr. Day, what was your intention? Did you intend to discuss the White Bill at this part of the meeting, or at your regular spot on the program tomorrow? I would be very glad to have you discuss it now if you so desire.

MR. DAY: Well, Mr. Chairman, as long as we are on legislation, I think it might be just as well to discuss it here, although it fits in with some of the things I will say tomorrow in connection with agriculture drainage.

This bill is expressing in terms of proposed legislation a recommendation of the Hoover Commission that the various water-use agencies of the country should be more closely coordinated than they are at present. As Mr. Bode has already stated, it proposes to consolidate the Corps of Engineers in the Bureau of Reclamation. One really important thing, to my mind, is that it proposes to set up a five-man board, responsible to the president, who would be entrusted with the terrifically large job of reviewing all water use projects to be undertaken in whole or in part with federal funds. This would include navigation, flood control, irrigation, fish and wildlife conservation, the whole gamut of water uses. Those projects would have to be cleared by this independent board before they would go to Congress, and the board would make a recommendation for or against. In fact, nothing would go to Congress unless it was cleared by this board, which would be directly responsible to the president. In my opinion, that is one of the most forward looking steps that has ever been proposed, because right now there are so many different interests in this complicated civilization of ours, so many pressure groups that are trying to bring special projects into their own communities that they look at it from a local or regional standpoint, and those may be in direct conflict with other folks who have other interests. That is very definitely the case in this midwestern country in connection with agricultural drainage and the loss of waterfowl habitat. Those have been discussed on many occasions, and I think should be discussed much more. There is no place now where we can sit down at one table before one board and try and correlate our thinking. That bill, to my mind, is one of the most important things that has been introduced in Congress. What its chances of passage are, I don't know, because there are some strong friends of Army engineers and strong friends of the Bureau of Reclamation, who will want no such consolidation but I am particularly interested in the overall board.

MR. STILES: Mr. Day, under the five-man board would the program of the Reclamation Bureau and Army engineers be subordinated to review?

MR. DAY: That is right.

MR. STILES: And by law they would have to submit their plan and follow after whatever the five-man board authorized?

MR. DAY: That is right.

MR. STILES: So they don't go on as they have in the past on their own initiative.

MR. DAY: All water use projects of any kind, agriculture, fish and wildlife, anything that is done with federal funds in whole or in part would be reviewed by this board, and no project would be introduced into Congress unless it was reviewed by this board.

MR. FEAST: How is the board appointed? Who appoints it?

MR. DAY: Appointed by the President. I forget whether it is with the consent of Congress or not.

MR. STILES: Here is the bill, Al.

MR. DAY. Thank you.

...Mr. Day read a portion of the bill in question....

MR. DAY: So you finally tie up in one package all of the water-use developments in whole or in part financed by federal funds.

MR. FEAST: How is the chairman of the board--

MR. DAY: (Interrupting) They are rotated on a five-year basis.

MR. FEAST: Do they serve without compensation?

MR. DAY: $15,000.00 a year.

MR. FEAST: What are the qualifications and specifications?

MR. DAY: I don't think it specifies it in the lgeislation.

MR. HOFFMASTER: Mr. Chairman, excuse me. Mr. Day mentioned before this morning that he heard from Washington on the Alaskan bill. How much land is involved? Will you tell us a little something on the way it is going to be enacted?

MR. DAY: The Alaskan Bill I mentioned is not the one you are thinking of. I should have clarified myself, that it is a provision amending the federal aid act to provide up to $75,000.00 per year federal aid monies for Alaska, instead of $25,000 that is now the limit.

MR. FEAST: I understand the Alaskan Bill is dead this session.

MR. DAY: I think that is correct, yes.

MR. STILES: Dead for one session.

MR. DAY: I don't know.

MR. HOFFMASTER: How much land is involved?

MR. DAY: Much of Alaska would be open to homestead.

MR. BODE: It does include all national forests in Alaska.

MR. DAY: I believe that is right. It has been sometime since I reviewed that bill.

MR. O. L. KAUPANGER: Mr. Chairman, I would like to make a few remarks on this White Bill, if I might. I sincerely hope that this organization is not going to come out for the White Bill. The point is that there are two very important committees at the present time that are making a thorough study of government reorganization in so far as water and land development is concerned. The one is the President's committee, the Water Policy Commission, and the other is the Budget Interior Agricultural Committee, which is making a survey in this country to ascertain if possible what the thinking of the people is in so far as some recommendation that would be appealing to all of the interests in the matter of unification. Now, my own personal feeling in the matter is this: That it is pure folly for us to be worrying about the Dingell Bill or the Duck Stamp Bill or any bill in conservation so long as we permit the monstrosities that are now going on on every water course in the United States of America. I think I stand here today as a man who has been to more hearings in the past five years on water, and especially the Missouri project, and here we have the start of a project to cost anywhere from five to fifteen billion dollars without any hydroelectric data, without

any dam controls, without any consideration for watersheds--it is just a hit and miss proposition, and it has reached a point largely where they don't know whether or not they have even got enough water for it.

We have another branch of government, the Department of Commerce, that has asked for the sale of the barges, because they have lost money since the beginning of the barge subsidy. There is one thing that I hope this organization will do, and that is to urge the International Association to recommend to the Congress of the United States that they hold up all land and water development until there is reorganization, a merger of all of these agencies that are now each going their own individual way. Mr. Day says that he has friends in the War Department, and friends in the Reclamation Service. I don't think I can say that, because I wouldn't know, I have been to too many War Department hearings, as I stated before. Now, my concept of conservation is this: Let's try and make land and water as removable as the War Department engineer. (Laughter) We are not making a great country. We are ruining one. If we who have interest in conservation are not now going to go out and fight against these water development programs the way they are being constructed, we are going to lose everything as far as I am concerned, because they are intent on destroying every natural characteristic in the United States. I sincerely hope that you do not come out with any one particular bill. My personal impression from Washington is this: That the White Bill hasn't got a chance at this session, and it is going to be a long fight. Agriculture is going to fight for the right to have control. We have one friend on our side: The till is empty. Thanks for listening. (Applause)

MR. STILES: Thank you, Mr. Kaupanger.

Mr. Kaupanger mentioned two agencies whose recommendations will be taken in connection with resources development; one is the President's Water Resources Board, and in its relationship to the White Bill, I see no place for conflict. I see no reason why there should be conflict between representatives of this board and the President's Water Resources Policy Committee. Certainly the work of the Water Resources Policy Committee would be valuable to the board in proposing the White Bill. As far as the recommendations of the Bureau of Budget are concerned (and it is my understanding that under the present law you will find that the bills that carry an appropriation in connection with resource development must be referred to the Bureau of Budget) their recommendations will be asked. It is my understanding that during the last session of the legislature, out of some 26 measures where the Bureau of Budgets made recommendations to the Congress that their recommendations were accepted on something like four. In our own affairs we consider it good business to consult with experts. That is exactly what we have done in the Hoover Committee, and certainly if the efforts were worthwhile we should give serious consideration to their recommendations; and I do believe that the recommendations of the Hoover Committee, while certainly there is going to be controversy, are for the most part sound. In my opinion, the White Bill is one of the soundest pieces of legislation that has come out of that recommendation. Is there any further discussion on the White Bill?

MR. KAUPANGER: I would just like to make one added statement, and that is, how are you going to restore vegetation from a water program, and that is what the White Bill does. They have absolutely no control over forests, and that is a very important factor in any reorganization program that concerns itself with water.

MR. STILES: It seems to me that that deals only with bills that carry appropriations. It seems to me--I may be wrong in this--as far as developments of the Fish and Wildlife Service are concerned, if they are regular works from our P.R. funds, that this board would not review those; is that correct, Al?

MR. DAY: No, it includes, water, fish and wildlife.

MR. STILES: It would include the review of the P.R. projects?

MR. DAY: Probably it would. It says "in whole or in part."

MR. STILES: That is right. That would be in part. Is there any further discussion on the Alaskan Veterans Homestead?

MR. FEAST: For the present, that is dead.

MR. STILES: Now, there are a number of pieces of proposed legislation that Mr. Bode did not touch upon. He dealt with legislation that had already been written; and there has been a lot of controversy on a proposal that there be a special license provided for hunting in our national forests.

I know that Lloyd Swift is undoubtedly interested in that. I wonder if Lloyd Swift would care to make a comment on that?

MR. LLOYD SWIFT: In a discussion of legislative matters, this is a little bit out of line, because it is merely a proposal or an idea. I think most of you men here know of the proposal through contacts with Wildlife Management Institute and some news notes that have occurred in the news letters of Institute and National Wildlife Federation. Now, it is a little difficult to discuss this proposal because I am not certain how much consideration it has been given by the state people.

The proposal, as I understand it, would be for federal legislation which would require a dollar stamp of hunters and fishermen on national forestry areas. The idea would be that the stamp would only be good when used in connection with a state license, and money would be used for wildlife work on the national forests, primarily in the field of habitat management, but only on a program which would be worked out in full cooperation with the states.

Now, that is merely an idea. As far as I know, there has not been any attempt to draft legislation along these lines; and there should not be at this point. It is merely submitting an idea to the state game people for their consideration.

You are familiar with the situation which I face as Chief of the Division of Wildlife Management, in the U. S. Forest Service. The Forest Service administers one hundred and eighty million acres of public land. We wish to encourage the production and use of wildlife resources on the national forests. For the past three years the wildlife work has been done without direct appropriation from Congress. It has been financed through small amounts from other appropriations. There will probably be a small item this year, perhaps $130,000.00 for wildlife work on this 180,000,000 acres of land. Obviously, that is a very small amount.

In carrying out a program of wildlife management on the national forests, what could or should forest services be doing? There are two types of work which are important. There are the things which can be done directly for the benefit of wildlife. These might be building an impoundment to create water areas for waterfowl or fish. Such projects are very much worthwhile, but the work that will pay off in the long run is having wildlife management needs considered each day. By that I mean to have men in the organization who possess skills they can apply in the day-to-day coordination to help the fish and game.

A simple illustration. We know that in some timber sales we can either hinder or help the wildlife resources by the way the sale is handled. For instance, cutting might infringe upon a stream and injure the fish habitat. On the other hand, logging might be conducted in such a manner that you could actually create wildlife benefits without additional public cost.

Then, of course, the job of watershed management is a day-to-day job that reflects back to the wildlife resources. The other day I had the pleasure of being over on the Rifle River area in Michigan where it seems to me the state is doing a very constructive thing. They are tying together the whole job of watershed management, getting all of the land resources handled properly as a fundamental step in improving the wildlife habitat.

Well, gentlemen, that is just a little background. I do want to emphasize this point, Mr. Chairman: That this stamp proposal has been referred to the state people through the Wildlife Management Institute. It is hoped that you will consider whether the stamp idea or any other proposal would have merit in our cooperative relation with the states. If you find merit in it, then perhaps later something could be worked out which would be acceptable to the states, and to the Forest Service. If it is not acceptable, then perhaps there are some other approaches which could be considered to further the cooperative programs which we have with the states.

I am happy to say that the Forest Service has strong cooperative relations with all the states. We have programs, with every state in the United States where there are national forests, and I am sure we are in a better position to sit down and talk frankly with all you people about our problems and your problems, and reach some sort of a program acceptable to all of you. Thank you. (Applause)

MR. STILES: Say, Lloyd, would that include fishing as well as hunting?

MR. SWIFT: As proposed, yes it would.

MR. McEACHRON: I would like to say a word about that. In South Dakota we have only perhaps a small portion, but I do think this association, as well as any other association, is interested in that, and should give it a lot of consideration. I can recall very well, and many of you here representing different states can recall some pretty bitter fights in our courts years ago, relative to the ownership of game in national forests. I am afraid if we don't watch ourselves closely, we are going to find ourselves right back in those courts again trying to determine who actually owns the game that is in the national forests. I believe that if we permit that to go through without a careful study that we are going to jeopardize our state rights, as Mr. Bode and so many other speakers have said. Certainly I am not in favor of jeopardizing any state rights. I am a firm believer in them, and I hope we all can keep them. How that problem of forestry in the nation should be financed, I am not qualified to say, but our cooperation up to the present time has been 100 per cent. But before we adopt a positive measure of favoring a stamp for hunting and fishing on national forests, let's look into it a little further.

MR. STILES: I am sure there are others who have definite ideas on this proposed stamp. Anyone else have anything to present to this meeting on the proposal to provide for special licenses to hunt in our national forests?

MR. FRANK BLAIR: I received a letter from Mr. Waters who introduced this same bill in Minnesota. We have thousands of lakes, and I questioned some of our sportsmen and those that I have talked to were absolutely opposed to paying for a $1.00 stamp to fish in the national forests or on water they feel belongs to the state. Now, the Forestry Service has a wonderful record that is respected by all of the people in this country. On the other hand, this association is talking about consolidation of certain governmental agencies so that we may have more far-reaching operations and less duplication. We have a Fish and Wildlife Service. Why should they not be authorities on all the fish and wildlife work in the federal land within the government and not have a duplication of those efforts? In talking to some of our sportsmen's organizations about it, the hunters didn't seem to say so much against it as did these other sportsmen, the fishermen that use those lakes. I am of the opinion that U. S. Forestry Service should stick to forestry, and forget about the game and fish. (Applause)

MR. FEAST: I like the way Mr. Quinn handled it down in Virginia. I talked with Mr. Swift this morning. We have a fund in our state that is designed so we cooperate with the various federal agencies in work of that character, and I believe if the National Forestry Service wants money to develop lands in the State of Colorado to improve game regions and fishing water, that it should be done at the expense of the State of Colorado, under the supervision, and in accordance with the State of Colorado. That is the way we expect to handle it out there. We realize that there shall be some constant, continual work going on here. Your problem is for fishermen. Out there the problem is for the hunter. I still say it is a state problem, and we are willing to put up some money to develop and maintain game habitat and fish habitat, and recreational facilities, and I think that is where the Forestry Service should operate on a state level, and not require a national answer.

MR. STILES: Thank you. Our time is growing to a close, but I believe we still have time to hear from Mr. Bode again.

MR. BODE: There is one angle to this: I don't know how many of you have thought of it, but it is the matter of precedent established. If the Forestry Service gets a wildlife stamp, how long before the Reclamation or Army engineers, or National Parks, and every other federal agency is asking for the same thing, and probably get it. Now, maybe that in itself may not be so bad, but you take a state that has three or four of those agencies in it, and you take the man who goes out and fishes, and then he buys a migratory waterfowl stamp, and buys a forestry stamp, and a national park stamp, how long is it going to be before those costs have pyramided to the point where when the state comes along and has to have—well, say an increase, or has to raise the cost of fishing or hunting, that the people will not stand for it, and the state will be the one suffering in carrying out the program. Now, all of these federal agencies have been criticized from time to time for not doing their part of the job in carrying their part of the load. It seems to me like that is going a long way if it does establish a precedent, and in my mind I don't see how it can help doing it. I don't see how it can help but go along with furthering the situation to where the state cannot carry on its own functions, which I believe belong to the state. (Applause)

MR. STILES: Thank you, Mr. Bode.

I know that Ernie Swift has some definite ideas. I wonder if you want to comment on this proposal?

PRESIDENT SWIFT: Well, I can appreciate the fact that the Forestry Service, which has some one hundred million acres of land on which they are responsible for the fish and game has a problem (and this isn't a debate between Swift versus Swift, by the way). I don't quite agree with Frank Blair that they have no responsibility. They do. In fact, I have attempted in my own small way to ride our congressmen to increase the appropriation so they can do a better job. Now, I can only speak for Wisconsin, and I know our situation from the standpoint of federal forests is different than it is in the west. However, we do have some very highly developed resorts and recreation areas within the federal forests, and I can see a tremendous upheaval among those people who have those resorts within the forests. They own them, and they were there before the forest was created, whereby their people would have to pay a special stamp when they come to their resort, and just beyond that point they could fish on the state license.

There is another thing that some of the old timers of this group will know about, and some of you don't, and that is the terrific battle that developed when the old Ordinance G-25 was put into effect. I believe it finally came to a conclusion at Memphis that we were fearful of its results, and it was argued before this group over a period of years. This, in a sense, is about the same thing, and we are probably attacking this more rationally than we did that, but I do think very definitely that we have an obligation to help the Forestry Service obtain funds. After all, they control some of the basic present wealth of this nation which improves and helps the game management situation on the land which they have jurisdiction over.

MR. STILES: Thank you, Ernie.

I know this discussion could go on for sometime. I am sure it has been very beneficial, but our time is up, and we will now turn the meeting back to our president, Mr. Swift. (Applause)

PRESIDENT SWIFT: Before we have the next report, I would like to say that the hotel has opened up the Colonial Room. It is down on the main lobby. You will see it as you go down. They have opened it up for luncheon to this group. It is very handy to get your lunch there instead of going outside.

...President Swift made other announcements relative to the buffet luncheon at the Schlitz "Brown Bottle"...

PRESIDENT SWIFT: I understand that at the last meeting in Nebraska there was a committee appointed, of which Mr. Morgan of North Dakota is chairman, and the other members of the committee are Mr. Steen of Missouri, and Mr. Ruhl of Michigan, and they were asked to report on the matter of coordination, and although Mr. Morgan says he doesn't have the complete report, as he would like to have it, but he can report on the progress of this committee. So we are bringing up-to-date some business that was transacted a year ago. Mr. Morgan. (Applause)

MR. H. R. MORGAN (North Dakota): Thank you, Ernie. Gentlemen, you probably need a little further clarification in regard to this committee than what Mr. Swift gave you. The committee originally consisted of our mutual friend, Buck Rider, from Ohio, Harry Ruhl, from Michigan, and myself. Then when Buck dropped out of the picture, I immediately got in touch with Mr. Swift, because of the fact I was very interested in some of the results of the questionnaire which might guide us in our thinking, and our future actions toward a little more unification. I left myself wide open, of course, when I wrote that letter to Mr. Swift. I well realize that many of you do know that Mr. Steen or Mr. Ruhl are in a position to give you a good report on the things that we wanted to find out about, but because of the fact that I wrote that letter, I was named chairman.

Now, the time element was very important, in that we didn't get started on drawing this questionnaire that was sent out to the various states in the organization until about two months ago. I do want to make this very clear, that because of that time element neither Mr. Steen or Mr. Ruhl are responsible for anything that I might say here this morning. We haven't had an opportunity to have a committee meeting.

I did send the two original drafts that we prepared for this questionnaire to both Mr. Steen and Mr. Ruhl, and they were very charitable in criticism regarding the final draft. I believe it has been much more valuable because of the suggestions which those two gentlemen made. I received but 12 copies of the questionnaire. Only 12 of them had come in by the time I left my office. The last one came in on Thursday, which was the day I left, and as a consequence, I haven't been able to interpret it and haven't been able to thoroughly analyze some of the data that appears in that questionnaire. Nevertheless, I do believe that there is an opportunity to do something worthwhile with a committee of that sort, if it continued. I think that in the original questionnaire we have possibly found out some things that are rather interesting, and that may prove rather valuable. I do not intend to make any recommendations regarding the results that we have obtained through sending out this questionnaire; however, I believe that after you have heard some of the data that has been compiled and received as a result of sending it out, that there may be some particular portion of it which you would like to take action on, and of course, if the work of this committee is going to prove valuable, it is going to mean this: We are going to have to take some sort of action on some of the things we find out.

We realize that all of you from your own states have different problems. That unification is not possible in all phases of the work. That we have to contend with various types of situations. The results of these questionnaires have brought out some facts that are a bit startling, and thefact that there is great variance in many of the things that we are doing, and possibly, if the result of the questionnaire doesn't do anything else, gentlemen, they will point the way to us in our future thinking and our future organization of our respective situations to a point where we will be doing things a little more on a more unified basis than we have in the past. Now, I have a few penciled notes here that I would like to refer to as I go through this. I would like to have you mentally jot down some of the results that you feel of interest enough to be worthy of further discussion, and then if the chair wants me to go into some of these matters a little more in detail, and make certain recommendations regarding them, I will certainly be happy to do so.

Twelve states, as I said, are included in the results that I have here. They include Colorado, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The first question deals with salaries. It might be interesting for you to know that the average salary being paid to directors of various Conservation Departments is $6,487.50. I am not going into the details as to show the high and low in these because time does not permit. The Department Director, or assistant to the director receives and average salary of $6,036.56. I think that it can be said that these figures do not represent the exact average, but they are arrived at by taking the listings of each state, and they include a high and a low, and then I struck an average; and I will use that in the final report which I will try to have prepared, and send it out at the earliest possible date. They will include the high that is being listed by the various states for particular positions, and then also the low. As I said before, the average of those figures will be taken.

I am going to skip over many of these various salaries because I don't believe that until you get the final report that we prepare, and have an opportunity to study it, that there is going to be very much that we can arrive at in the way of a concrete result in the way of recommendations. I think we should all remember that because of the possibility of improperly worded questions on this questionnaire that some of the results may be erroneous. However, in making this compilation of all the available data the classification manual was used where they were available, and they were available from some states. Here is one that I think is rather interesting, referring to the salary paid biologists with no experience. It is pretty hard to take a man that has been with the department for a number of years, and for somebody that is not familiar with his work, to put a price on his services, but I think that possibly could be done to a greater extent with these young fellows that start out with no experience at the time they are being offered an original salary. Now, the average pay for that type of biologist in Game Management is $2,813.50 a year. I think it is rather interesting to know that the same state has the high and low record in salaries for that class of help. The high is $5,100.00 a year, and the low being $1,860.00 a year.

Fisheries received some attention in this questionnaire, and we find out that the head of Fisheries Divisions receive an average of $4,718.20 a year. There is quite a discrepancy there as to what various states offer. We know, of course, that some states have a big job for a man heading up the Fisheries Division to do, whereas others don't have too much work for that class of technician. Again we come down to biologists working in the Fisheries Division with no experience. We found out that the average being offered for this position without experience is $3,162.00 a year, with a high, again, of $5,100.00 being offered, and a low of $1,860.00 being offered by the same state. It seems to me that with the Dingell Bill just around the corner, and with a great many agencies bidding for that class of man, that some action should be taken, and maybe the result of the questionnaire, which deals with fisheries biologists without experience, there is an opportunity to do something toward standardizing the salary. I think there is going to be a lot of bidding for that particular class of technician if and when the Dingell Bill and the money accruing from it become available.

Bear with me while I go through the notes here, and maybe we can find something that is interesting. Public relations received some attention. We found out that Directors of Public Relations, from an average of 12 departments sending in questionnaires, receive $4,639.11 a year; with one state paying $8,000.00, and another offering $2,400.00. There is a great range in that one. We will skip the rest of Public Relations for the time being. In the Division of Enforcement, after we get by the head of the division, who receives an average of $4,928.93, which is the average for the 12 states, we find the figures leveled off pretty well, and that none of us are too far out of line. District wardens receive an average of $2,822.00, with one state paying $4,800.00 per year, and the low state, as listed, paying $2,040.00. We find that in enforcement work. Enforcement officers in all 12 states combined educational work along with enforcement duties, and out of the 12 states, approximately 23 per cent of the warden's time was put in on educational work. We find 10 states furnish uniforms for their men; six states furnish side arms, six states do not. Five states furnish radios, whereas three of the eight reporting on the question do not. Six states furnish airplanes for their enforcement work. Boats and motors are furnished by all states; and out of 11 reporting, only three furnish automobiles. Now, there is something that might be worthy of discussion. I personally feel, if we are in a position to furnish automobiles for enforcement, that it would be saving a considerable amount of money. We find that in cases where the wardens are furnishing their own transportation, on the average they are receiving 7.6 cents per mile for transportation.

We find that nine states have divisions set up to do education work through publications. Eleven have devices for publicity, and 10 for public relations. Eleven states combine these under one head, and the average personnel doing this type of work is 6.8, not including clerical help. All 12 states report using magazines. Seven of them have monthly publications, and two on a bimonthly basis, and three on a quarterly basis. The average of these have been published for a period of 15.3 years. Some action might be worthwhile on establishing the size of the wildlife magazine. This would, I think, be handy for filing purposes, and certainly, the magazine would be more readily recognized by the public if they did have a standard size. I have a few sizes listed here. It will give you an idea of what I am talking about. Four states have magazines measuring six by nine. Five states, eight and a half by 11. Two states, nine by 12. You can easily see there was no uniformity. These magazines run from eight to 55 pages in size, and average 27.6 pages. Four of them use colored covers. Three of them use color throughout the magazine; and five, no color at all. The average circulation is 30,500. One state reported that this magazine was free to subscribers. I wish we would have included that question in the questionnaire. It would have been interesting to see how many states do charge for the publication. Minnesota did make that notation in their questionnaire. Newsletters are also being used by all states, with one exception. Seven of these are issued on a weekly basis, and two have one twice a week, and one biweekly. The average size is 2.4 pages, and these are sent out by 11 states to the weekly newspapers, sportsmen's organization, and nine send them to other Conservation Departments. There is apparently one state that does not send one out. Personally, I am very interested in what goes on through these news releases from other states, and I never miss one. Although I am not going to mention the state by name, I hope that this situation will be cleared as far as we are concerned, at least.

We can cut this short because I don't have it in the form that I had hoped it would finally appear in. There is one question that I think you all will be interested in. I know that I was getting pretty tired yesterday afternoon when I was working on this, but when I got to this one, it woke me up, because it is of vital interest to me. That is Question No. 5. It deals with the various types of programs that were being stressed by several states. I was interested in finding out that, out of 12 states reporting, 10 are presently stressing a habitat development program. I think that points out the crisis which wildlife faces as a result of changing land use practices at the present time. It was interesting to note that most of the work is being carried out on privately-owned land; most of this development work. The next most widely stressed program seems to be that of fisheries; and the third one is artificial propagation of game species. Very little is being done, apparently, on trapping developments by any of the states. One state reports carrying out a fur restoring program or project, and I believe that was the one exception.

I don't think I should try to go into the nature of any more of the data that we were able to gather through the use of this questionnaire. After the little bit of work that I have done for this committee, I am more convinced than ever that if a committee of this sort is continued, which I am in favor of, we can arrive at some rather practical and worthwhile ideas that can be incorporated in our various programs. Incidentally, Mr. Chairman, I am not bidding for the job; but nevertheless, I think we are going to have to do something along that line, gentlemen. Our interests are becoming more tied up than ever in the past, and as time goes on they are going to be tied up even more, and we need to work together. There are some other things that I would like to have touched on such as license sales. They are

going to be just a little bit hard to interpret for the various departments by virtue of the fact that we have so many different kinds of licenses being issued by the various states. I want to apologize for the condition this report is in this morning. Personally, I can't take all the blame myself. It is just one of those things. We got off to a bad start. However, I promise you that I will go over, if the opportunity permits, the data that I haven't been able to analyze with the other two members of the committee before leaving here, and prepare as complete a report as is possible of the findings of the committee. That will be prepared, and sent to each director. Thank you very much. (Applause)

PRESIDENT SWIFT: Thank you, Mr. Morgan. I, for one, think there is a wealth of material in the things that he has submitted in this report, and that a great deal can come of it. Before we close, I would entertain a motion that that committee continue in the same membership as it is.

A DELEGATE: I so move.

A DELEGATE: I will second that.

...The motion was put to a vote and carried...

...Secretary Scott made an announcement concerning the noon luncheon...

PRESIDENT SWIFT: I wish to thank Mr. Bode for his participation, and also Mr. Stiles. I am sure that we are going to have an interesting discussion this afternoon. It will be one that we all want to stress, and there should be some good heated debates on carp control.

With that, we will adjourn until 1:30.

...The convention adjourned at 12:00 o'clock noon until 1:30 o'clock P.M. of the same day...

MONDAY AFTERNOON SESSION, JULY 24
(General Chairman - Vice-President, Dave Leahy)

VICE-PRESIDENT LEAHY: Let us get under way, gentlemen. Mr. Swift has asked me to make several announcements.

...Vice-President Leahy made several announcements...

VICE-PRESIDENT LEAHY: We have two papers for this afternoon, gentlemen. The first one is Conservation Education for Youth and Adults, by Director P. J. Hoffmaster. (Applause)

P. J. HOFFMASTER: I should say I protested a little bit to the President, Ernie Swift, for putting me on so soon after lunch, but he says we always need a burping hour immediately after a meal, and that this would be a good subject for the folks to burp on; so maybe we can go on that basis a little while here. Is that what you said, Mr. Swift?

PRESIDENT SWIFT: Yes, that is what I said.

MR. HOFFMASTER: Before going on with this, I want to subscribe to everything that the President said this morning. I was sorry there wasn't an opportunity for the audience to be heard when he said if we are going to have a strong government, we must have strong people, and if we are going to have strong people, we must educate the individuals and make them stronger.

I think you have opened the doors, Mr. Swift, and I feel the subjects we are going to deal with this afternoon are pretty much along that line. Now, I have prepared a paper on the subject of Conservation Education. I am not going to confine myself to that paper. If the Association wishes to include it in its minutes, it might do so, and if not, it will be quite all right with me. The paper I have prepared is one for another meeting in another section of the nation, so you may run across some things not pertinent to the discussion this afternoon. (Editor's Note: See Appendix for this paper, "Conservation Education in the Public Schools.") I should like to confine my suggestions here to Conservation Education for Youth, because I have no new experience on the business of education for adults. You have all been dealing with that for years, and each has his own experience in that line. As I understand it, the law in your state here, Mr. Swift, requires that conservation be taught in schools?

PRESIDENT SWIFT: That is right.

MR. HOFFMASTER: I think that is a very remarkable step, and have no doubt that there has been a great deal of good that has come from it, but I feel that as we are going to get farther along with this education business, we need to supplement the class room teaching with some other kind of experience; and that is what I should like to talk with you about a little bit here. Two summers ago in my own state we put a small group of people to work dealing with natural resources. We learned that unless we could have a large segment of people thinking along the same lines, and then concurrently doing something towards the restoration of these renewable resources, that we were not going to be able to get very far in that because we found they looked upon us as lots of people look upon a soap box program. So we went to the head of the school system for the state, namely, the Superintendent of Public Instruction, and he soon saw that there was something there that needed to be done.

In the schools in every state they have been teaching Civil Government for many years--I presume as long as schools have been in existence. This is what one superintendent said to me: "We have been doing that for so many years, we have been trying to make good citizens, but I am inclined to think that unless we can acquaint the youth with the things that they live by, namely, natural resources, we are not doing our duty in qualifying these young people, both to making a fuller and better life, and to discharge this responsibility to the government." Thereupon, the Superintendent of Public Instruction took it upon himself to deal with the schools to see if we could get more conservation education taught in the school. In the late 30's, through the aid of CCC and WPA, we built what we call a training school about midway north from the Indiana line primarily for teaching our people conservation. Well, we found that we didn't need that service more than about a quarter of the time at that time, so we made it available to the teachers, with the idea that if these teachers were trained basicly for imparting conservation to students, that they could get up there and be indoctrinated with the outdoors. They could go to experimental stations where they could learn fighting forest fires. They could see forests that were planted five years ago, 25 years ago, and 40 years ago, and could see nurseries. They could see the effects of forest fires. They could do something on fish. They could do something on game.

The teachers came in there of their own volition. During the last 10 or 15 years, I presume ten or fifteen thousand teachers, expressing themselves to their own free will and accord, without credit on the part of the management of the school, attended this service, in order that they might become better acquainted with the resources, so they could better teach the subject of conservation in schools. While the teachers were there, they said, "My,

if the children could be exposed to these conditions." They would mention how splendid it would be if the children could see the nursery planting, then the growth, and actual cutting of timbers and other things, how much it would be for their benefit. Well, after that was said often enough, we tried some experiments in getting the children out into the so-called camps, the outdoor camps, we called them. I should state here, that it isn't our idea that the Conservation Department should take over the business of teaching youth. After all, there are people trained for doing that. I presume in this state, Wisconsin, they have some 25,000 teachers who are trained to do that. In Illinois, I presume, there would be 50,000. In my own state there are 35,000 teachers. But I think this can be said: That unless this group, people like you and I, will spearhead this business, pointing out to the teachers, to the policy making people in the field of education, the status of the resources, and pointing out to them the relationship between them and the people, that we can't expect to obtain the desired results. This can't be expected to be taken on too rapidly. I believe it is the duty of people like us to bring to the attention of the educators the status of our natural resources so that they might do something about it.

We started out with some experiments in getting the youngsters out in the so-called camps. Let me state that in our own state now, the thinking is that every boy and girl should spend at least two weeks outdoors in the camp during his or her lifetime in the elementary school. In my own state, this would involve perhaps seventy-five to one hundred thousand boys and girls annually. You can readily see it is not going to be an easy job to do, because to get that number of folks out is expensive. There is no doubt about it at all. This idea of getting young people outdoors and letting them learn by seeing and from doing is not new. We had it called to our attention when we were pushing this thing along that it takes push. It takes promotion. It was pointed out to us that learning by camping is an old thing, but there are these differences, as I see it, in the way we are talking and the way camping has been conducted in the past. Camps in our own states are available to the groups and people who are more or less in the upper economic level, or extremely low economic level. The majority do not have access to the camp by and large, so it should be mandatory for every boy and girl to supplement their class room teachings by some experience outdoors for observation and by doing. Further, it should be done during the school year, and not when school is out in the summer. It should be a part of the curriculum that the student should get credit for spending the two weeks out in the outdoors with nature. In some schools they had to make it up, but they were willing to do extra work in order that they might get to these camps.

So far there are 60 schools in my own state--and pardon me for the frequent references to Michigan, but I have become more familiar with the figures there. There are 60 schools who have sent groups out ranging from 40 to about 100. There are 17 camps in Michigan that are available for that use in public ownership, and, of course, there are a few in private ownership. Many of those camps are winterized so they are available for spring and fall, as well as in the summertime. Now, as much as possible, we have been trying to carry out this program, at least with the experimental work, on public owned lands. It is pointed out to the educators that one way to teach citizenship is to let the youngsters see the things that they live by, and when they plant trees, if they plant it on publicly owned land, that it is going to mean more to them than if they were to plant on privately owned land. It is felt, too, that if they could work on fish problems, on game problems, on soil erosion problems, and on all other kinds of problems, of which there are many on publicly owned lands, that it might generate in them a feeling towards the nation, which they may not have been able to generate otherwise. So you can readily see that if

you are going to have--in my home state, Michigan, 75,000 boys and girls--going out for a period of three weeks, it is going to take a lot of land, because you don't want to plant 40 acres, and go back and plant it tomorrow with another group, and so on down the line. The things that they do on the land must remain there so that they may go and see it. That is when you can build encouragement and incentive to them so they feel justified in putting forth the energy that is necessary.

Now, as I stated before, we were having difficulty going into the schools to get them out to have them learn more about the outdoors, because we felt that we were not able to furnish what was necessary in coping with the problems in conservation; but as we get into it, we find that the benefits are two-fold, and whether it is more beneficial to the youth than to the service, that hasn't been determined. I don't know as though I care too much, because, after all, if we build into the minds of these young people the proper concept of resources, I don't think we will need to worry very much about the outcome. We must not forget, either, in our deliberations and in our directives, that most of the resources in the nation are either privately owned or so controlled by private individuals, that you are not going to be able to work even if it were able to be divided, you are not going to be able to do the job through government agencies alone. It becomes necessary to do the work on the lands, in the rivers, in the lakes and in the brooks through private individuals to a very large degree, and for that reason it is incumbent on us, I believe, to have a very definite understanding on the part of many people in order to get by.

I had an experience last year, and some of you had it, too, at Lake Success, where the United Nations called a conference on natural resources. I believe there were 40 nations represented there, and there were some 250 technical papers prepared and left with the United Nations. There were between 500 and 600 people that participated. The conference lasted from the 16th of August until the 16th of December. I was able to be there only a few days of the week. Well, after listening to some of those papers, and, of course, you can understand, 250 of them, all types of papers, I said to a man sitting by me, "What do you think of it, Howard?" "Well," he said, "it is quite a show, isn't it?" And, of course, it was quite a show. We argued for awhile, and we came to this conclusion: That so far as know how is concerned, it is pretty well established, either on paper, or in the mind of the people so as to how to handle the natural resources, both as to changing ways and also for the restoration of resources. The business of having that applied is entirely another question. How in the world we, in our state, are going to be able to cause 175,000 farm owners to apply the newer principles of soil conservation, I don't know. We are working on it.

How in the world you are going to get the owner of some 263,000,000 acres of privately owned forest lands to practice the better principles of forestry, I don't know. We need to keep working on it. I am inclined to think that our best approach on this, the best method to get this know how which has been worked out nation-wide applied to the land, to the water, or crop is that of having a much broader understanding on the part of many people, and that, we believe, can be obtained best by having these youngsters get outdoors, and deal with the things themselves, feel it, smell it, and see it. Their interpreter need not be a teacher. Let the interpreter tell them what it means when the rain falls on the side of a hill. Let them see what it means to have a large number of fish in the lake with a limited amount of food. There are so many things that can be done to impart lessons to these youngsters. I hope that question will get some discussion.

Mr. Gilbert, I am going to give the rest of your time to discussion. Before I sit down, I should like to say that in the May, 1950 issue of the Journal of Educational Sociology, the management of that paper gave it over entirely to camping and outdoor education. Those of you that are interested in it can get a copy of it for 35¢ by writing to 167 West 13th Street, New York 11, New York. There is some very good discussion in there on the various subjects that we are talking about here. Thank you. (Applause)

VICE-PRESIDENT LEAHY: Thank you, Mr. Hoffmaster.

The discussion here, gentlemen, has been placed in the very capable hands of Mr. Paul T. Gilbert, Executive Secretary, for Nebraska. Mr. Gilbert. (Applause)

MR. PAUL T. GILBERT: Thank you, Dave. I would like to say if you are not here either physically or mentally, it is because you are so egotistically or politically inclined as to not forfeit the prestige that you might get out of some phases of game management in order that you may sit by an unknown about 50 or 60 years from now and see the freckled noses of today content with what he taught his kids tomorrow.

In Nebraska, a certain individual considers Al Day "the king". He considers me "the professor", and I don't think Al is getting any bad publicity by being called "king". In fact, I think it has done him a lot of good.

I don't mind be called a professor, because I think that even though we may lose something personally, even though we don't gain anything in our own lifetime, when the little freckled noses reach maturity, we will see pretty much whether our life is worthwhile. We have heard from Pete as to some of the fine things that he has had in mind, but I would like to start this discussion by calling on certain people whom I know have done considerable along this line. In the first place, I wish our good friend John Scott might be here and tell us what the Conservation Education Committee is doing through the Izaak Walton League. I think it is a very fine group, and I think that John, who of course is retired as professor, is doing even a greater job in his present capacity. We do have Leonard Schwartz here from Illinois, and I think I will call on him first. While waiting for him to come up, I think all of us are using the average means of conservation education. Incidently, how many of you states use the radio as a medium? How many do we have?

...Four delegates raised their hands...

MR. GILBERT: Are any of you using television at all?

A DELEGATE: We have tried it out a little bit, but there aren't enough people to look, and pictures are too fuzzy to make us feel that we are doing a good job.

MR. GILBERT: How many of you carry on compulsory programs with your schools? That is more like it.

MR. JORGENSEN: I am relatively a newcomer in this field, having been in the department a little over a year, and I didn't suppose I was going to be called on. I enjoyed listening to Mr. Hoffmaster, and it wasn't the first time, of course, that we have heard about the wonderful program they have in Michigan. We don't have a comparable thing here in Wisconsin, although I did just return from what we feel is really an activity that is exceedingly worthwhile in conservation education, and that is a school where the State Teachers Colleges are working together in a conservation workshop. It has been a

five week session that is just finishing up held in Eagle River at the Trees for Tomorrow Camp. The facilities do not permit a large enrollment, but we feel that if the group consists of only 50, then there are 50 more teachers really equipped to do a job. Mr. Calhoun and myself, as we have thought about this problem, have felt that we must reach the teachers, because we have a feeling that while every school tells you they are teaching conservation education, that that is a sort of a relative statement. We have been making a survey of just how much and what kind of conservation education is going on in the school system, and I think with that, we are going to make quite a bit of progress. We have found this, that if the teachers have the information, and know where the materials are, they are more than anxious to do the job. The trouble has been in our state, and I don't know how that compares to the other states, that while the teacher's training schools do cover this area, there is no uniformity in courses offered.

There is one group, the County Normal Schools, which have worked out a uniform plan, but there is a lot of difference in our nine state teachers colleges between how they fulfill that adequate conservation requirement. It is only when the school administrator demands the teacher be trained well in conservation that we are going to make some real headway. We feel that we are moving ahead, and with the help of the Department of Public Instruction, we are meeting this problem. Together we are mapping out our state program in which more emphasis and more help will be given the teacher, and we think that there will be many ways they can step in and do something, and get some of these experiences that Mr. Hoffmaster referred to. We have some 250 school forests, and we have some wonderful examples how these school forests are used as teaching techniques. Now, if we could do a lot more of that, I am sure that we would be getting the job done which you have referred to, wherein they are actually using their own forests. Here in Wisconsin we are encouraging that in every way we can. We are working with the teacher. We feel that if she understands the job she will do it, because she knows that conservation appeals to youngsters, the freckled noses, as they have been referred to. We know if the teacher is given the material to work with she will get the job done. Thank you. (Applause)

MR. GILBERT: That sounds pretty good for Wisconsin. I wonder if Mr. Schwartz is here? We would like to hear from you, Leonard, on what your state is doing in conservation education.

MR. LEONARD SCHWARTZ: Mr. Chairman, and members, I would like to say that my great difficulty is trying to keep from placing too much emphasis on our educational program. So often I think we take for granted that everybody else is interested in the things that we are interested in. My contact with the education program in conservation dates back long before I became the Director of conservation, and if any of you men have attempted to work with sportsmen's groups, I think you will realize some of the problems that faced us in the early days in the sportsmen's organizations. We had no trouble in interesting members in game problems, or in fish stocking programs which were highly beneficial to their groups, but we did have a problem in getting the same men that would give of their time and talent and monies, almost without exception, to get interested in an educational program, both of youth and of adults. So when Director Bode was speaking this morning that although sometimes we think our work is to little avail, I think back on what has been accomplished, and then realize that we are getting someplace.

So far as Illinois is concerned, the philosophy applies to our educational program, because as recently as five years ago, 1945, I remember that in Illinois very few people in the Conservation Department or in schools or in sportsmen's

groups or civic clubs were interested in a conservation educational program for youth or for adults. We, in a federation of sportsmen's clubs, inaugurated such a program, and we found to our surprise that the State Superintendent of Public Instruction was way ahead of us in his thinking. He was just waiting for someone to take the lead and give him an opportunity to put the program into effect. From that beginning, five years ago, I would like to report that this summer there will be held in Illinois, 25 schools for teachers in 25 counties, at which over 800 teachers in our public school system have attended and received credit on their teacher's certificate for the work that they complete at this summer school. Some of those classes will be as much as three weeks. The minimum is one week. They will be given credit for one or three hours work on their teacher's certificate for taking the conservation subjects in these summer schools.

Now, in our own department's program at Lake Villa, Illinois, we have a very fine spot to teach both youth and adults conservation subjects. This summer we will have in attendance each week a group of 50. This is the maximum we can take at one time, giving them a very brief short course in conservation subjects. There will be four classes of Junior boys or girls who just completed the sophomore year in school. Our thinking there is that next year they can go back to their respective counties and organize a junior conservation organization. We have found in their junior year they have the respect of the other classes, of the sophomores and freshmen, and at the same time they do have the time to teach the conservation subjects which were found lacking in their high school course. In addition to the high school students, we have a class of teachers. We are fortunate this year in having a group of 35 counties sending their superintendents of schools. Last year we had 38 county superintendents . We have found that these men, once they see the course that is being given, and are subjected to the teaching themselves, immediately become interested in the program, and go back into their respective counties and set up some type of conservation education in the school, or else send a boy or girl to the school.

In our own department, for which the school was originally started, we have found that it was very beneficial. Of course, in Illinois, we operate under a political setup in the conservation department, which meant a year and a half ago we had about 110 new men in our law enforcement division. All of these men have now had two courses at this school. I can remember very vividly that at the first school when we told these men that their job was 10 per cent law enforcement and 25 per cent public relations, and 65 per cent educational, that most of them looked at me, and looked at one another, and I am sure they were very doubtful as to just how true that statement might have been; but after 18 months experience, and after two courses through that school, the same men that were skeptical in the beginning now are boosters for the school and boosters for the educational part of our program. I remember in interviewing most of those men that when we would ask them what their qualifications were to serve as a conservation officer they immediately began to tell of their knowledge of the woods and forests, and how they knew the favorite fish holes and how they knew of the violations that were going on, and I remember one fellow especially, after I had listened to him, told me about his ability as a wrestler, and his ability as a boxer. One fellow told me that he wasn't afraid of the devil himself. Then when we asked them, "What has been your experience in working with boys and girls, what have you done towards working with 4-H Clubs, or the boy scouts or girl scouts, or have you ever talked to civic clubs, worked with farmers, what do you know about reforestration," and things of that kind, they more or less were taken down, and surprised to think that that was even a part of the program; but we are placing much emphasis on that part

of our program in Illinois. Maybe we are going a little too far overboard on it. I don't think so, because most of the opposition is now coming around to our way of thinking, and that leads us to believe that we are probably right.

One of the fortunate things so far as the educational program in Illinois is concerned dates back to the experience that I mentioned relative to working with sportsmen's groups. The man who headed our Junior Educational Committee is now one of the advisors to the State Superintendent of Public Instruction. This certainly makes a very fine working arrangement, and one that has been acceptable to the head of that department, as well as our department, and we are very happy with the agreement. We believe that the success of conservation lies in the educational program. We believe that hunting and fishing is just a normal by-product of good soil conservation practices, of proper land use, a good pollution program, of proper care of our lakes and rivers. That, after all, habitat is the answer, and that we get a knowledge of game restoration and wildlife planning through the educational program. So as far as Illinois is concerned, we are going to play up that part of the program very strong. Thank you, Mr. Chairman. (Applause)

MR. GILBERT: Thank you, Leonard. You are to be congratulated on your program. Leonard, I would like to ask you what teaching facilities, I mean textbooks or visual aid material you have available?

MR. SCHWARTZ: We found that the library of available material written on the level of Juniors has increased greatly in the past few years. So far as our teachers, most of them are members of the State Natural History Survey, personnel from the University of Illinois, and we do get help from the Fish and Wildlife Service, as well as men from the FBI and our State Highway Patrol.

MR. GILBERT: Do you know of any regular conservation textbook, as such, that can be used?

MR. SCHWARTZ: We do not have a regular textbook to apply specifically to our needs. The State Superintendent of Public Instruction has published two books that we are using. They both pertain to soil. They are now in the process of writing a third book that will correlate a lot of things of the Department of Conservation in this book. When it is available, I think we will center a lot of our work around this publication. We are getting fine cooperation from the Division of Education.

MR. GILBERT: Thank you, Leonard. We haven't heard today, as yet, from either Ontario or Manitoba. I wonder if either one of those provinces has anything to offer in this line? Either one of you?

MR. G. W. MALAHER, Director Game and Fisheries (Manitoba): Mr. Chairman, and gentlemen. I am afraid I haven't very much to offer. I rose to ask a question. I am especially interested in the presentation of the paper we have just heard, and of the remarks that have followed it, and I am hopeful that I will be able to take something back to Manitoba that will be really worthwhile on this education question. The question I have in mind to ask the chair is: What is the allocation of cost in connection with these programs involving the school teacher of Michigan and Wisconsin as to where the costs were absorbed?

MR. HOFFMASTER: I can talk to you on the subject, but I don't know as though I will answer it. So far as I am concerned, I am inclined to think that it has been absorbed largely by the school systems. I must not hesitate to say, either, that the Department of Conservation has made a very real contribution to that. As in Illinois, our Division heads, and other key

people in the Department of Conservation, are made available at these schools to bring out the salient points concerning the natural resources, and in that way we have made available a good many man hours. As a matter of fact, there has been some complaint on the part of the heads of the divisions, because they felt there was too much time being expended on educational work and not enough on actual wildlife work. There are other ways of obtaining money, Mr. Malaher. I find that some of the schools institute a fee back to the pupils. Some of the parents, after they have learned of the program, desire to have their children go to the camps because it is under good guidance, and under good supervision, and they have, of their own volition, made available such additional funds as is necessary to pay for the expenses, that is, the additional that might be required that the schools would not pay for. Then too, we have found in some instances, civic organizations have made funds available for the sending of individuals to camp, bearing some of the expenses; but by and large, it has been borne by the school systems themselves. I should say here, too, that the legislature, two years ago, appropriated the great sum of $10,000.00 in our state to supplement this on a more or less experimental basis. The people who are in close touch with it from an educational point of view, and the results from it and the testimonials from the parents and students, will justify a much larger expenditure in due time. I am inclined to think that one of the difficulties that we are having now in our own state is that of keeping ahead of requirements with the facilities, and those are things that we are always going to have to watch out for.

MR. GILBERT: Do we have anything from Mr. Harkness of Ontario? I mentioned the two provinces.

A DELEGATE: He is at the airline office. He will be up in a minute.

MR. GILBERT: In some of our rural conservation meetings we have had contact with one or two very affable young ladies from Missouri. I didn't think they brought them to conventions with them, but those ladies did give us the story on some of the most educational policies, and perhaps Mr. Bode might want to comment on this from his state.

MR. BODE: I think that the plan we are using in Missouri has been explained a number of times to most of this group. We have not gone into a plan similar to Michigan of establishing a separate teacher's training school, but we have set up a rather systematic effort in connection with the schools. Our Education-Information Division combines the informational work, the publication work, the public relations work, and education work, and we have in that division an education section. This division is headed by a school man, thoroughly trained in education. He and eight assistants spend the greater portion of their time working with the schools.

We have one educational assistant in each of our supervisory districts. It is his function, working in coordination with local field agents and other local fieldmen, to contact schools and develop a program, usually on a county level. We happen to be one of those states that does not believe that the best method of accomplishing conservation education lies in the compulsory teaching of a course in conservation in the schools. Our work is built chiefly around the integration of conservation work in the subject matter groups and courses of study that are ordinarily being taught in the schools. We find we are getting a large measure of cooperation for our Wildlife and Forestry Divisions by that method.

We have set up--it is not a compulsory thing at all, and I can't tell you exactly how many counties use it; but a good percentage do use it--what we call our conservation workshops. These are of one or two days duration, organized on a county basis, and under sanction of the county superintendent of schools. We have a staff there and we bring in authoritative and prominent outside lecturers to bring to the teachers of the county up-to-date thinking and instructional work in conservation. That in brief, Mr. Chairman, is the general plan we are following.

MR. GILBERT: You know, as I was sitting here thinking as these men tell what they are doing for their freckled noses, about their various projects, that is about the only constructive thing that our dictators have done, is capitalize upon the things which today we have failed to capitalize on. If you will remember back in the days of the Hitler youth movement, and if you remember seeing pictures of what they were doing in Japan, if you have seen pictures of what they are doing over on the Communist side of Berlin, you have seen that the very first thing they tried to do was to get ahold of the kids and regiment them, and get them sold on the program. That will sell it faster than you will sell it, or the press will sell it, or anything else. That is just how important it is. They have no program to sell. We definitely have a program, and should be all the more enthused. When I mentioned radio programs I believe you raised your hand. How do you handle that?

MR. H. R. MORGAN: We are using radio in a limited manner. I happened to know from the subject I talked on before lunch that many of the states are using it to a certain extent. As long as we are confining discussion to education, I would like to say a little something about a youth educational program that is in process of being started, and it might be of benefit to those who have not gone too far in this line of work. Our approach is that we are not going to try and handle that through the department proper. We feel that it is a big job, a little bit too large for us to handle in that way, and we are not sure of the reception that we might get, so we are going to act carefully, because it might be a case of choking it down the necks of some people that won't be particularly receptive to the idea.

We have promised many groups that are interested in the youth organization and youth education in the state that as rapidly as possible after the material is made available, it will be distributed to them for use, and we feel that if we approach the idea in that way, that it will be asked for only by those that are interested in utilizing it, and consequently it might do some good.

Now, our program consists of approximately 130 projects for youth, and is designed to take in every youth in the State of North Dakota, regardless of whether it is a child confined to the hospital bed or a member of a youth group or organization. The job of compiling that material is a tremendous job. We have told our people it won't be completed in a year, maybe not in two or three years. We are trying to give preference to those subjects which seem to be most in demand. However, we are not allowing that to guide us entirely, because we feel in some respects we know more about what should be done than some of the people that might be asking for certain subjects. We are using our discretion in that matter. We are giving important subjects priority, and we feel that we will have gone a long ways toward meeting our responsibilities to youth matters when this material is made available to these individuals and organizations who are interested enough to ask for it.

MR. GILBERT: Thank you, Mr. Morgan.

Checking down the list we find we have listened to members from quite a few states. We still have some time left, so I think we will just complete the roll call here. Dave would you care to say a few words?

VICE-PRESIDENT LEAHY: Well, In Kansas we don't have the hook-up with the schools these other states have talked about. We divide our efforts largely to working with 4-H Clubs and with Boy Scout groups. In our state they have set up what they call a ranch for 4-H Clubs of the state, and each summer they have what they call an annual encampment at this ranch, and our game management supervisor spends three or four weeks at this camp giving instructions or a series of lectures. During the winter months they supervise the work very closely, and each of the counties cooperate with the various clubs. We have game management supervisors that do a great deal of work with the Boy Scouts. Then we have a film that can be shown at the schools the year round upon request, and I think that is it.

MR. GILBERT: Do you have a program on education, Mr. Feast?

MR. FEAST: I will be brief, Paul. I could tell a story, but I won't. In Colorado we have worked with education for a number of years without what I would consider a first-class educational program, until the last year. By another act of sabotage we were able to pluck one of Pete's men, and we also got a good man from South Dakota, and a good man from Montana, and we already had a good man by the name of Culbreth. Most of you know him, especially most of you in the educational field. Our education is split into two services. One is the Division of Publicity, radio and news, and the other in the Division of Education Information, headed by a manager under him. We have four district educational representatives. We have one man heading a staff working up pamphlets and booklets to be used in the schools, and we have about 10,000 feet of wildlife film and other film related to related phases of conservation activities which we show to schools and to sportsmen's clubs. Then we have our magazine. We recently purchased 2,000 acres of primitive land upon which there is no dam up in the mountains near Denver, and we are going to build a dam on it some day! (Ed. Note: camp?) We are going to put into operation a system, we hope, similar to the educational program now in the State of Michigan. Thank you.

MR. GILBERT: How about Indiana?

MR. H. P. COTTINGHAM (Indiana): There are two outstanding accomplishments that we have in our educational program, particularly through our schools the past year, and that has been the compiling of booklets. We are now in the process of getting out the fifth booklet. These are on soil, timber, wildlife, fisheries and so forth. The booklets are sponsored by our Department of Education. They go into every school in the State of Indiana. We probably have four or five remaining publications in that series of booklets to complete this educational program. About five years ago, I believe, we started on a small scale of teaching conservation in schools. We started a conservation school. That has progressed over those four or five years to the point where now we have 40 or 50 teachers who are actually given credit hours in attending this school that is held in one of our state parks, and is conducted through the Extension Service of Purdue University in cooperation with our Department of Conservation.

MR. GILBERT: Thank you, H. P.

How about Bruce? Do you have anything you would want to add to what we already have?

MR. STILES: Gentlemen, it seems to me that one of the most significant statements that has ever been made in the field of Wildlife Conservation was made by the late Dr. Aldo Leopold of Wisconsin. I don't propose to quote it exactly, but it goes something like this: That in order to change our wildlife population we must change the habitat that is used by the wildlife population, and in order to change the habitat we must change the thinking of the people who use the habitat. I feel that after floundering around in the quagmire of conservation practices for many years that Dr. Aldo Leopold has certainly pointed the way, that in all the practices that we may employ to improve hunting and fishing, there is nothing that even approaches that admonition of Dr. Leopold's that if we are going to have hunting and fishing, if we are going to maintain that in this country, that we must change the thinking of the people who use the habitat; and that can only be accomplished by a conservation education program.

In Iowa we are assured that the most important thing that we can do in that state to improve hunting and fishing is to promote the conservation program by conservation education. Now, we are just scratching the surface, just getting our feet on the ground in that program in Iowa. Within the past couple years have employed a conservation education assistant. I might say that he comes with a good background. We got him from Missouri. He is a graduate of the University of Missouri. It is a part of his job to contact all of the schools in the state, and to talk especially to the elementary teachers, because we believe that we cannot teach the coming generation sound conservation until we have first taught the teachers conservation. We have gone ahead with the service of brochures, which we send out to the elementary school children. One of them we just completed is called "A Peek at Wildlife." There is a hole in the cover, and you look through and see a picture of a simple example of wildlife conservation. It is actually written in terms that a six or seven year old can understand. We are sending those out to the schools, and it is explained by our man who is in charge of that program. We also have gone into the program of conservation schools for teachers. It is directed to teachers of the elementary years, and they get five half-hour credits which apply to their teacher's certificate. I assure you that in Iowa one of our major activities is promoting conservation education.

MR. GILBERT: Thank you, Bruce. Incidentally, you might drop us all one of those brochures. I would like to see one.

MR. STILES: All right, I will do it.

MR. GILBERT: I don't believe Mr. Wilson is in the room. Does somebody want to speak for Minnesota as to what they are doing?

MR. WILLARD: In the absence of Mr. Wilson I think I should probably tell you here something about what Minnesota is attempting to do in the field of conservation education. We started some 15 years ago to talk conservation and to urge its incorporation in the public schools. At the start we didn't find a very enthusiastic response. Educators felt that conservation, because of its wide-spread nature, its controversial aspects, and the fact that it was not an exact science, was hard to introduce as a teaching subject in the schools. This early concept has changed, and the Department of Education of Minnesota is cooperating whole-heartedly in the advancement of the subject. Progress is being made towards implementing conservation education in the state's educational

program. As a matter of fact public opinion in our state has come to the support of a greater emphasis on conservation education faster than what we have had facilities to meet or do the things we have promoted and which are being accepted by the public. We lack a conservation center to which people may be invited to come and discuss conservation problems. We are going to ask the next legislature for such a center and we have high hopes that our request will be granted.

It seems to me that conservation education ought to start as soon as children begin to attend the schools. Reference to birds, flowers, and simple things we see on every hand, and the relationship they bear to the things we need and enjoy, can very well be woven into the general fabric of education in all of the grades. In other words, more references should be made to conservation in our textbooks and in the classroom studies. The Department of Conservation of Minnesota has a Bureau of Information which works in cooperation with the state Department of Education. This bureau is advancing education through the radio, the movies, and the public press. An essay contest is put on by the department in cooperation with the Minnesota Federation of Womens' Clubs, in which all high school boys and girls who desire may take part. One subject is assigned on which all essays are written. The papers are rated and one girl and one boy from each of the Federation's ten districts, receiving the highest rating, is given one week's vacation at Itasca State Park at the expense of the Department of Conservation. During the stay at the park teachers are assigned to tell the entire group of the problems of conservation and its importance. This essay contest is very popular and is being made an annual event. The advancement of conservation education in Minnesota is of utmost concern to the department and we feel that very satisfactory progress is being made.

MR. GILBERT: Thank you. That essay contest is especially interesting.

Ohio. Who would like to speak for Ohio?

DR. DAMBACH: Ohio, as some of you gentlemen probably know, has been going through a series of experiments in educational efforts for the past several years. In addition to our regular program of public relations, including news releases, radio program, our Conservation Bulletin and exhibits, we have been maintaining a Wildlife Extension Service program. All of this has been within the Division of Wildlife. That latter service is aimed primarily at reaching rural adults and youth groups. We have, for example, a wildlife extension specialist in each of the conservation districts in the state. This staff is supplemented during the summer months with young men taking college work in conservation who work with young peoples' groups at 4-H Camps and similar summer camp programs. In addition to this program the Division of Wildlife has been the chief supporter of the Ohio Conservation Laboratory for teachers during its eleven-year history. The purpose of this Laboratory is to train teachers to teach conservation in the Ohio public schools. This program is supported by a staff member who devotes full-time to working with public schools throughout the state, particularly with elementary schools.

Despite all of our efforts we do not believe we are doing the job of conservation education that is needed in the state. We are inclined to believe that we are going in too many directions at once. We are currently planning to develop a Division of Education and Information within the newly established Department of Natural Resources.

This Department will have one section which will deal with public school programs. We are not certain at the moment just what staff will be devoted to this work or what direction we will go in but we are certain that it will be in close cooperation with the State Department of Education.

MR. GILBERT: Thank you, sir.

Mac, how about South Dakota? Is Mac here?

MR. McEACHRON: I don't know whether I am qualified to speak on that. I have one of the commissioners here with us, and I want to bring out right now that he is quite an asset to conservation. He takes pride in working with schools, and civic groups, and I think perhaps at the present time he is the only commissioner we have left with us that does that. He does a swell job. For the past 15 or 18 years we have brought out an educational program through our wardens and fieldmen. It is surprising to note the reactions that we had on that when we first started. The average warden or fieldman said, "Well, I am not qualified to do that type of work. I am not a superman." Well, it soon developed that these men were able to go out and address these school groups with very good success. We also used our wildlife film in connection with that. We have quite a library of film, however we do not have enough so that we can make it available to other states. We have to confine them to South Dakota. Now, I don't know of anything further that we have done that is outstanding in that field. Until such time that we find something a little better--and we are getting a lot of ideas from you fellows--we are going to continue to do that. I think, perhaps, we have been a little lax in the past, but during the years of the manpower shortage, we all know it has been a little bit scarce, we probably have been too lax, but now we are getting a better type, a better educated type of fieldmen or conservation wardens, and they are in a better position to appear before the youth and get results. In my opinion, your best contact with the youth is through your fieldmen. Thank you.

MR. GILBERT: I can't help but be enthusiastic. You know, it was about eight years ago when we had our meeting up at Bismarck. At that time we weren't talking education at all. It is amazing how far we have come in such a relatively short time. I believe Pete wants to have a word in closing.

MR. HOFFMASTER: I am thinking about a remark made here by Mr. Bode, in that he felt it would be better to have conservation education on an optional basis, and in my discussion I mentioned it being as mandatory. Now, I recognize that there is more than one way of doing that. At least one state makes it mandatory by statute. There is a rather large number of people in my own state who feel that it should be made mandatory by law there. So far it has been debated very much, and I doubt very much whether it will come into law. It is mandatory to the extent that the school officials will make it mandatory. After all, the officials can say whether the children will learn to read, write, or do arithmetic, or geography, or anything, and it is equally incumbent on them to indicate the kind of subjects they feel should be taught. So we, in our own state, are working along the line that it should be mandatory. Maybe not 100 per cent, but generally so, and it should come from the policy-making people.

There is one thing we must not lose sight of. Leonard Schwartz used it in his own statement. He said that the policy-making people, namely the Superintendent of Schools, from the top down, are the people to get interested in your problems, and are the people you are going to go to. There is still another thing not to lose sight of. Who is going to determine what is a good or bad principle in conservation teaching? Are you, or are the schools?

That question was raised before a group that I was with not long ago. Then the "right" kind of person, the person who wants to do everything that needs to be done for the benefit of our resources came forward, and said, "We must not cut a tree. We shouldn't be killing so many of the birds. We should not be killing so many of the animals." Now, mind you, somebody has got to set the date limits for seasons, and if you people who are dealing with it don't get in there and help set it, it is likely to be set wrong. That is the reason I feel it is incumbent on us who are dealing with wildlife to spearhead the program. We can see better, perhaps, than those who are farther away from the problems involved. These school people are intelligent people. They are right-minded. They want to do the right thing, and if you can go to them with the principles of conservation, I have no doubt about it that they will put them into effect.

MR. GILBERT: There is quite a lot to be said about the part that law enforcement officers might play in this program of conservation education. I wonder if we couldn't have time to call on Mr. Hadland, Enforcement Chief here in Wisconsin, to explain the program that he has worked out with the conservation wardens.

MR. HADLAND: The conservation law enforcement in this state, as well as other states, has been building up year after year. In analyzing our own picture here, we felt that a program of youth education was in order, and we handled that program in two steps. One is where the warden actually met the boy or boys, as it happens to be, in the field where they were violating the law, and he identifies himself, and he sits down with them and he tells them why we have conservation laws, why they are needed. Then after he has given the boy a picture of what the conservation story is, he wants to meet his parents. So he goes to the home, and he discusses the situation with them. Most of them are very cooperative. We suggest that if the boy doesn't belong to a youth organization, that he join a junior conservation club, or join the boy scouts, or any other youth organization where he will have a chance to expend the energy that all youngsters have, and expend that energy doing something constructive. Then after the warden has followed up with the parents, he sends in a card to the Madison office, and we keep a special file on these juveniles. We write these boys a letter and we tell them that we think Wisconsin is one of the leaders in the conservation field, and we ask for his cooperation. We send him literature on boat safety, on gun safety, and we send him pictures so he can study the various species of fish, as well as game, and other literature that will be useful to him, and we stress forest protection, and ask him to contact the rangers at the forest protection stations, and they will be glad to show him what they are doing. The forest protection division, by the way, also meets with the children in the schools and educates them along those lines.

The second phase of our program is where the warden contacts the juvenile at meetings, such as your 4-H Clubs, your Boy Scouts, your church organizations, or any other youth organizations, and gives them the story of conservation stressing the importance of living up to the conservation laws. We belive that in years to come it is going to save a lot of fish, game, and fur for all to enjoy during the regular open, established seasons. We know that if we are given time we can mold the minds of the youth, and we feel that the time the warden spends on this program will pay big results in the future. Thank you.

MR. GILBERT: Thank you, sir. In other words, gentlemen, if the freckled noses of tomorrow are the hunters and fishers of tomorrow, and one of those freckled noses could well be the fellow that steps into your job, are you working hard in order to build something? Are you going to have them prepared to take over? Our time is up, so we will close this discussion. Thank you. (Applause)

...President Swift made several announcements...

VICE-PRESIDENT LEAHY: Our next discussion, gentlemen, is on Carp Control and Management. Frank Blair of Minnesota is the Chairman, and Leonard Schwartz, Mr. McEachron, and Charles Lloyd are members of the panel. Will you gentlemen come up here, please?

I will now turn the meeting over to Frank Blair of Minnesota.

MR. FRANK BLAIR: I have been attending the International meetings since 1915, and this is the first time they ever got me on one of these programs. I would sort of feel that I didn't do my duty if I didn't say something in addition to this subject I am supposed to talk on this afternoon, Carp Control. Carp control is really a small matter in connection with game and fish conservation work, and I have decided in later years that game and fish conservation work is a small matter when you compare it with conservation of our basic natural resources.

I have attended these meetings for years, and I have concluded that now we have reached the time when we have got to do something about the conservation of these basic resources. We know that our game and fish license fees pay the bills that take care of our game and fish conservation work, and game and fish has been able to go a lot further in conservation than we have been able to do in soil, water and forest conservation work. I really believe that in about 15 years, at the rate we are going, with the increase of the number of hunters and fishermen, less and less habitat for game and fish each year, with the money we have to spend for game and fish work, we are going to run into a stone wall because of the lack of interest in soil, water and forestry conservation.

This country was built up to become the greatest in the history of the world in the shortest period of time, and in doing that we wasted a lot of our resources. We have never learned to save; unless we soon learn to do that, you might as well forget about fish and game conservation if you are going to let your soil, water and forests disappear. We hear a lot about water resources, but seldom hear the expression "water conservation." The soil alone will not perpetuate our lives. We have to have water with it, and to preserve water we have to have cover over part of the earth, that means forests, or shrubs or grass and clover.

I think all of the Conservation Departments better pay more attention to trying to do what they can to get more money into the conservation of our basic natural resources if we expect to perpetuate game and fish. Everything we have in the country right now in the way of material gain came from the development or processing of natural resources. Unless we soon learn to save them, we are going to be lost. In this game and fish work, as most of you know, it is not very much different in any of the states, we start out to get certain results, and often get just the opposite, like a lady who visited with us back in 1940. She lived in China. She was there for 15 years. She said that Chinese boys could be employed for 10 cents a day. She had one of them who took care of her garden outside, one who took care of the cooking, one

who took care of cleaning up the house, and another one who took care of the laundry. This latter one had the habit of coming into her room without rapping and would throw the laundry on the bed. She started remonstrating with him one day, and told him that hereafter he was to rap on the door before he came in. He looked at her, and said, "No worry, missy, me looky in keyhole, nothing on, no come in." (Laughter) That is the way we sometimes get the opposite results in game and fish work. Now, on this rough fish control, I asked a certain member of my division to write me an article that I could give. He wrote me three pages of history of the carp, but not a word of information on control. So I have had to write it over. I did that last night, and got one of the Wisconsin girls to typewrite it for me this morning. So here goes:

Carp have been raised in China for more than 2,000 years and men brought carp from far-off Cathay to Europe before the year 600. By the 16th century, England had its "carp farms." In 1876 carp crossed the Atlantic Ocean and in 1877 were officially transplanted into American waters. In 1882 carp were first planted in Minnesota inland waters. Other states to the southeast and west of Minnesota welcomed the stranger into their inland waters also, and the Mississippi River soon became the carp line for planting the entire watershed.

Very little attention was paid to the carp until about the years 1907 and 1908 when sportsmen and others who visited lakes and streams for the purpose of angling observed great quantities of carp and at the same time noted that lakes inhabited by carp for any length of time showed evidence of natural vegetation disappearing. It was about that time that the fish commission decided to make an investigation of the carp situation. The results of this investigation seemed to have proven conclusively that the carp were very destructive and unless some effort was made to remove them, it would be impossible to maintain and propagate in a natural way, game fish in those lakes.

In 1909 the State legislature enacted a law which authorized the fish commission to inaugurate methods of control and the battle has been on ever since, and up to the last few years it was a losing battle for the more desirable species of game fish. Although it is believed that carp can never be exterminated, we now do have hopes that we can keep them under control in many waters of the state. Sportsmen's organizations and the Minnesota legislature for the past 25 years have been alert to the situation and constantly prod the Department for new and increased effort toward its solution. Up to 1943 there were four legislative investigations of carp removal operations and of charges against officials, also a grand jury investigation in 1943. In all cases officials were given a clean bill of health, but the finger of suspicion remained. Charges of the past were that contractors farmed the lakes, and this was probably true in many cases.

During earlier years lakes were let out on bid to contract fishermen, the state having received from 18 to 40 per cent from the sale of carp, which sales were then handled by the fishermen. This arrangement was found unsatisfacotry and the system was somewhat reversed in 1943 when contractors were allowed a flat rate of 80 per cent from the proceeds from sales, the state taking care of all sales. In 1948, because of increased costs of operations and lowering markets contractors were given a flat rate of 85 per cent and on carp selling for two cents per pound or less, the entire proceeds were given to the contractor. Both contractors and buyers were placed under bond. This arrangement has been very satisfactory both to the state and to the fishermen. The 1941 legislature appointed an interim committee to investigate carp removal operations. In their report to the 1943 session, a part of it read as follows:

"The appropriation act in 1941, Chapter 548, Section 37, Subdivision "G", states the various sums which the 1941 legislature considered appropriating for the use of the Division of Game and Fish in the administration of the laws during the biennium. **The main reason that this table of proposed expenditures was embodied in the Appropriations Act was because of public demand for the eradication of rough fish from public waters where game fish are found. The public was aware that commercial fishing and removal of rough fish from public waters by contract was effected only so long as a profit was involved in the removal. It was known that contractors who pay their own expenses and pay the State a commission on the sales of the fish removed, cannot and do not operate except where there is a prospect for a profit. It was known that if the profits ceased, many rough fish remained in public waters and many waters are unsuitable for contract fishing for profit.

"It was realized that if game fish are to be conserved, the rough fish must be destroyed or controlled because they thrive and multiply at the expense of game fish,** that the legislature required that rough fish should be removed from public waters irrespective of profit and that the State should manage such operations by employment of labor and the furnishing of equipment therefor ** of inaugurating and initiating a vigorous program ** that efforts be made to develop new markets now opening up for such rough fish and that emphasis be placed upon removal through State operations rather than reliance upon contract fishing."

State crew operations were tried on a small scale in 1940. However, it was not until the 1943 legislative report came out that momentum was given to better and inceased operations. Since that time criticism of the department decreased to such an extent that since 1947 there has been practically none at all and for the first time in more than 35 years, the department has been commended on its improved carp control operations. I might mention that through an error on the part of a political campaign headquarters, a candidate for nomination for a state office was quoted in the newspapers last week of having stated in a talk that the carp removal operations were a failure. Commissioner Wilson and Taylor Huston attended this meeting and know that the candidate did not make that statement. It was an annual picnic of a sportsmen's association that is interested in a lake that was carp infested for years, and up to five years ago had very poor game fishing. This lake is now a good example of what can be done. At any rate this association has seen the pike fishing improve each of the past four years and have commended the department on its accomplishments. I want to talk about this lake later on.

All I knew about carp and rough fish up to 1946 was what I heard around the state and in the department, and what I read in the newspapers. I was in game work for 36 years and didn't pay much attention to fish. In August, 1946 Commissioner Wilson hypnotized me into accepting the directorship of the Division of Game and Fish. Immediately, instead of having to satisfy a mere three hundred thousand hunters as I had been trying to do for years, I found myself facing more than one million fishermen. I soon learned that I had quadrupled my troubles by taking on that many more bosses.

I began to try to figure out what chances there were of solving, not only the game, but fisheries problems. With ever increasing numbers going out to take game and fish, and decreased habitat for wildlife, it did not look very bright. When I took office, we had six different bureaus in fisheries work - artificial propagation, fisheries research, stream improvement, rough fish removal, licensed commercial fishing and natural propagation.

With the Commissioners' approval, fisheries were reorganized into one bureau composed of units. We believed this would make for more efficient and economical operations. I wanted to know from this bureau what our assets were in fish life, and about how much was being taken annually. The research unit of the bureau came up with assets amounting to two hundred million pounds of fish, the majority of which was rough fish. The annual take by one and one-quarter million anglers was set at forty million pounds, or the more desirable fish that take a lure or a bait. This left in the waters, rough fish that seldom look at a bait, resulting in the state having to step in and remove the rough fish in efforts to keep a proper balance. The figures on rough fish were running about eight eight million pounds annually, not even one-fourth of the take of game fish. It was a losing battle. It meant more rough fish must be removed and more game fish stocked in the waters. It just could not be done with the amount of money available. License fees would have to be quadrupled. That could not be done, but we might be able to double the fees, but what else could be done in efforts to reach a place in six or seven years when we could restore as much as we are taking.

Here is where I want to talk about Lake Shetek, the lake previously mentioned that has shown such an improvement in game fish life. The records showed that this lake had been seined by contract fishermen for several years, with an average take of about 300,000 pounds annually. The lake was infested with carp, and game fishing had become nil. What I wanted to know, was--how could the small carp all become jumbos in one year? They did not. I found that when a big room was made in the lake after a winter's haul of 300,000 pounds, that by the following winter, another crop of big carp came in from the Des Moines river. This was quite a lucrative lake for the contractor. Could a state crew do a better job in this lake? I thought they could. But how could we get rid of the contract fishermen. He belonged to the commercial fishermen's group that for years had a lot of political power because they contributed to the campaign funds of the political parties. Two great leaders headed these fishermen during a 35-year period and they pulled a lot of wires in the earlier days.

A great conservation commissioner and Minnesota's greatest conservation governor gave me full support in cancelling the contract of one of these leaders and three others, one of whom had the contract on Lake Shetek. This was the beginning of carp control. Intensive work in this lake by a state crew, draining of Talcot Lake below on the Des Moines river and freezing out the carp, with control structures on Talcot lake and traps in between, soon brought about noticeable improvement in game fish species. Heavy restocking of game fish was necessary in efforts to place the game fish in the majority and then they would keep the carp in the lake under control. The chief operation is shutting off the supply of carp from the rivers.

Another lake, Waconia, not far from the Twin Cities, provided excellent bass and pike fishing up to a few years ago. Carp were in this lake and it was seined during winter months up to the early 1940's. During the dry 1930's trees grew around this lake. When the water returned, the trees died, many of them were rooted up by wave action and became water-logged and scattered all over the lake, making seining difficult and costly. Game fishing went down and the carp took control. Last winter a state crew was moved to this lake to trap carp at inlets and to use trap methods in the lake. We hope to have this lake back in control of pike and bass in about four years. If this happens it will be definite proof that carp can be controlled and game fish again may be in the majority.

In past years pressure groups and politicians had the department jumping from one lake to the next, each receiving some carp removal work, but not a complete job. This is no longer practiced. We have asked the sportsmen's clubs to have patience until we can reach their favored lakes. Our methods now are on a watershed basis, building dams to prevent new supplies from the Mississippi and other rivers, carp control devices on present dams, trapping and seining the lakes back of the dams, and heavy restocking with game fish, will bring worthwhile results. Just a month ago a dam was completed on Cherry creek in Le Seuer county that will prevent carp entering a chain of some nine lakes, that at one time were fish lakes, then because of years of silting, they became waterfowl lakes, then no waterfowl and only carp. We are confident that within three years this watershed will be back in shape with aquatic plants and waterfowl.

Editors Note: Here Mr. Blair read an article from the Le Center Leader of July 13 and named a number of lakes that were examples of good carp control and improved fishing.

Methods adopted in Minnesota and now used in operations are contract fishermen who primarily seine carp under the ice during winter months; licensed commercial fishermen; bullhead fishing on percentage basis; state crews operating both winter and summer in seining lakes that contractors will not take because of difficulties in seining or because of small carp. State crews also operate traps during spring and summer months and use trap nets and other equipment; sportsmen's clubs and individuals may trap or net carp under permit and carp may be speared and carp control devices are used such as floating controls below dams, all metal or finger controls bolted at tops of dams, that will let debris drop down when weight is sufficient. The Lake and Stream Improvement Unit of the Bureau of Fisheries is continuously experimenting with different types of structures and equipment to control carp and other rough fish.

It was state crew operations that stopped carp farming of lakes and began the work of taking all carp regardless of size. If there is no market for carp, we give them away to farmers for fertilizer or any use they want to make of them, or to rendering plants. We have had occasions when carp could not be given away. A few years ago we had to bury about one million pounds. Imagine using heavy equipment to dig a trench and filling in with a bulldozer. It seems a great waste of food, as carp are delicious if properly smoked and cured, yet there is no other way out except to destroy them. The carp in Minnesota waters in its relation to game fish is not much different than the wolves in northern Minnesota in relation to game life. The state pays a bounty on wolves, but has not had to do so on carp. Our people prefer game fish species and destruction of the carp and other rough fish and we are doing everything possible to try to give them what they want. The carp infested waters are mostly in southern Minnesota. We have other rough fish in northern waters that have to be controlled such as bullheads, perch, sheepshead, Burbot and herring in inland lakes.

All of the other so-called rough fish are native species. Generally, the Buffalo inhabits and does well in the same waters where carp are abundant. In some southern Minnesota lakes bullheads are greatly desired, but in northern lakes it is almost impossible to keep them under control. Minnesota laws do not permit anyone to return carp to any waters after being taken. Minnow dealers are subject to arrest if carp minnows are found in their possession.

All carp control operations are strictly supervised to see to it that game fish are returned to the waters and carp are properly weighed. There are three area supervisors who have charge of all rough fish field operations. If a contractor goes the least bit out of line in making hauls without a supervisor, wrong weights or taking of game fish, contracts are cancelled. In the beginning, when the field supervisors took over, I told them that if I heard of them even taking a cigar from a contractor, they would be subject to dismissal.

The one deserving most of the credit for improved rough fish operations, for being strict and running a well-disciplined outfit is the Supervisor of the Rough Fish Removal Unit of the Bureau of Fisheries. Several men have held this position in the past, but none could equal the present head, who has proven to be the most efficient of any and she is a lady of great ability, Ann Feist. She is with our delegation. She and H. O. Swenson, Supervisor of the Minnesota Bureau of Fisheries, will be glad to join in the later discussion and answer any questions about Minnesota operations. I might mention that state crew operations cost money and are not self-sustaining, but when a state crew shows a take of say one million pounds of carp, it may mean as many as five million carp, in numbers which mean less carp in the future. During the past two years we have built up to ten state crews with an average of 15 men to the crew. In 1949 we had 34 contract fishermen. We organized our Lake and Stream Improvement Unit one year ago. During the year they had four carp control dams constructed.

The number of carp control devices installed on dams - 9.
The number of carp traps installed this year - 283 - an increase of about 100 in two years.
Number of permits issued to clubs and individuals for carp traps and fishing this year - 129.
Eight watersheds are being surveyed for carp control dams and 24 are being investigated for possible controls.

Here is a chart that will give you a picture of rough fish operations in Minnesota during the past 12 years. It will be noted that rough fish taken in 1938 amounted to approximately two and one-half million, of which about two million pounds were carp. In 1949 almost fourteen million pounds of rough fish were taken of which about ten and one-half million pounds were carp. I want to thank the President and the officers and members of the Midwest Association for being placed on the program and for your kind attention. I hope that the information herein given will be of some help in furtherance of what we call good conservation. I now take great pleasure in turning the discussion on carp control over to the leader, Mr. H. P. Cottingham of Indiana.

MR. H. P. COTTINGHAM: After hearing the millions of pounds of fish that Chairman Blair reported being taken out of Minnesota waters, I can say truthfully that the Indiana rough fish problem is very, very minor. Many of our rivers, not all of them, have a large amount of carp in them, yet in those streams that are not polluted right now with city sewerage, we still have a good supply of game fish that is being taken annually in those rivers, and some streams are practically free of carp.

In our lakes, of which we have approximately a thousand in various sizes, Indiana's Lake and Stream Survey, our research unit, has reported in various examinations and showed that the largest portion of these lakes are practically free of carp. In our shallow lakes, however, we do find a large amount of rough fish, but we don't have very many of such lakes.

I want to relate one operation that we have made in Indiana. It covers a period of years. I am referring to Bass Lake, up in the northern part of the state, with an area of about 1,600 acres. I think it was the 1913 flood that we had in Indiana, when the Yellow River, about eight miles away from Bass Lake, flooded so high that the back waters reached Bass Lake, and to the best of our knowledge that was the first time that any rough fish got into Bass Lake. Along about 1933 and 1934, it was very noticeable that Bass Lake was consistently muddy, the vegetation had disappeared. Incidentally, Bass Lake has an average depth of 10 feet. I think the deepest water is about 20 feet, and there is not much of that.

We started a seining operation in 1935, and operated a thousand foot seine and an eight hundred foot seine during the entire summer and fall of '35, and through most of the summer of '36. That lake was very adaptable for clean seining, and a total of about 30,000 rough fish were removed, amounting to around 70 tons. The project was concluded, and we felt that a good job had been done as far as cleaning out the carp, buffalo, and quillback. After that it was very noticeable how the water cleared up, and in 1937 it was blue water. The game fish came back very nicely, and it has been producing game fish consistently.

As I said, our control problems are not bad. In another lake that is shallow, we have had a commercial fisherman seining, and usually he takes about 10 or 12 tons of fish each year, mostly carp with some buffalo. I have often thought that he must put some of the females back, and probably feeds them a little corn to fatten them up, because those carp and buffalo I have seen come out have been nice big fat ones. That operation, as I recall, has been going on around five or six years, and about the same number of rough fish is taken out each year on a 20 per cent and 80 per cent contract operated under the supervision of the department.

Gigs are legal in Indiana, and there is a great amount of gigging carried on for rough fish, and the effect is noticeable on the numbers. We have permitted some conservation clubs who seem to feel that their particular lake has too many rough fish to operate seines or in some cases nets, under supervision. I certainly would say that there has been no remarkable results out of those operations.

Last, I want to mention that we do have one natural control in Indiana, and that is our large negro population. You can find them lining the rivers on both sides, and they take out a lot of carp. That is all I have to report from Indiana. Before going into any other discussion right now, I would like to call on Director Schwartz of Illinois, who is on the panel with us.

MR. LEONARD SCHWARTZ: Mr. Cottingham, Mr. Chairman, members of the convention: Probably the members of the panel should have gotten together for a rehearsal of our act, because I notice there is some overlapping already in our topic, and probably some controversy in our conclusions, or at least our findings. Maybe that is why Hank Cottingham was made chairman, because he didn't have a carp problem, and he could at least be neutral and be open for conviction.

Since I have this paper prepared, I think I will just go ahead and read it, and maybe we can talk out some of the differences a little bit later in the discussion.

Carp have become more widely distributed through the waters of the United States than any other introduced fish. Since the introduction of this exotic species of the minnow family 73 years ago much argument has made unprejudiced convictions of its worth difficult.

Carp are native of Asia having been cultured by the Chinese since 500 B.C. Introduction into Europe was in the 13th Century and into England in the 16th Century. Carp culture is an art that has long provided an important source of food in Asia and Europe. The first attempt to bring carp into the United States was in New York in 1830 and in California in 1872. The first successful attempt to introduce carp in the United States was made by the United States Fish Commission, which brought 345 carp from Bremen, Germany, in 1877. Of this parent stock 277 were of the mirror and leather varieties and 118 were scaled carp. All were put in ponds located in Washington, D. C. From this breeding stock 12,000 young carp were distributed in 1879 to more than 300 people in 25 states and territories. Public demand had much to do with having carp brought to this country and distribution by the Federal Government increased rapidly for years, until its discontinuance in 1897.

Introduction of carp in Illinois waters began with the first distribution from the Federal Government in 1879. From the first consignment of carp, records were kept and published in the Annual Report of the Illinois Fish Commission. In a five year period, 1881 - 1886, over 5,000 privately-owned small lakes and ponds were stocked with carp from the state and federal governments. Carp culture was thought by many people to be an easy task, and that these fish would be as common, on a farm, as hogs and chickens.

In 1885 the first carp were stocked in 12 rivers of Illinois by J. F. Ellis, United States Fish Commission. In 1887, 16,000 more carp were planted in public waters of the state.

The first large carp caught from any river of Illinois was reported from the Illinois River at Meredosia in 1886 (30 inch fish). This undoubtedly was a fish that had escaped from some pond which had been stocked earlier. The years between 1888 and 1890 carp of considerable size were caught in increasing numbers, especially from points along the Illinois River; and by 1891 carp were being shipped from Meredosia. The population of this fish had multiplied and the growing population was increasing to such an extent that in a single seine haul at Clear Lake near Havana, Illinois, 3,000 pounds were taken, in 1892.

During the five years from 1894 to 1899 the carp catch increased in Illinois from 1/2 million to 8 and 1/3 million pounds, the black bass increased from 70,000 pounds to 102,000 pounds, during the same period. The decline of the black bass from 1899 to 1903 to 45,000 pounds was accompanied by a drop in the carp catch to 6 million pounds. Catfish increased from 700,000 pounds to 900,000 pounds between 1894 and 1899; crappie increased from 138,000 pounds to 210,000 pounds; sunfish 175,000 to 507,000 pounds. All species fell off some in 1903. Suckers fell off from 155,000 pounds to 67,000 pounds between 1894 to 1899, and increased to 199,000 pounds in 1903. The only important commercial species that had a steady decline from 1894 to 1899 were buffalo and drum (white perch); the first declining from 3½ million pounds to about 1/2 the amount, and the drum from 348,000 pounds to less than 100,000 pounds in 1903. It is by no means improbable that the cause for this decline was apart from any depredation and competition of the carp. The rise of large populations of carp in our waters and the decline of other species has largely been the results of habitat changes, which in many cases has been brought on through man's ignorance. For example: As the Illinois River became heavily polluted it was found that the carp could tolerate these unfavorable conditions with greater success than any of our native fishes. During 1920 when Peoria Lake (a shallow, warm, fertile lake) was quite foul, the carp was left in almost complete control.

The control of carp in Illinois has followed a similar pattern to that of other parts of the country. The first attempts were directed at the complete eradication of the carp by seining and netting. A great deal of time, effort, and money was spent before it was realized that the task could not be done. Next followed the programs of reduction of carp and other coarse fish in particular waters in the state. Complete records over the years are not available to base an absolute account of the effects of carp removal. Data collected recently indicates the removal efforts through netting are annual events with little reduction of rough fish. All-out reduction of large carp populations were for attainment of immediate results not thinking of the future. Many of our lakes in which carp had established themselves firmly were attacked by seining methods. In a relatively short time these lakes were again carrying large carp populations. Heavy cropping of carp in these lakes resulted in a tremendous crop coming up the season following. Few actual beneficial results from intensive netting operations have been noted, and improvements were of a temporary nature. Considerable benefit to waterfowl in the re-establishment of weed beds, and a slight amount of improvement of pole and line fishing in some lakes have been observed in particular bodies of water where the partial removal of carp and other rough fish have been carried on year after year.

In comparison with many states Illinois is deficient in lakes. Natural lakes are largely represented by only one series of glacial lakes located in the northeast portion of the state in McHenry and Lake Counties, and by oxbows and flood-plain lakes within the flood basins of the larger rivers. Not having the numbers of large lakes, Illinois' carp and undesirable fish control program is largely centered around farm ponds and small lakes which in most cases are artificial impoundments.

Control methods used such as complete drainage or poisoning have been effective, and the complete manipulation of populations in these waters, managed by these methods, has been successful in the eradication of carp. Complete eradication by either of these two means can be applied only to small bodies of water or lakes constructed in such a manner as to allow this management practice. Every effort is made to curtail the re-entry of undesirable fish like carp. The problem of carp and other undesirable fish gaining access to seemingly a closed system as many of these lakes appear to be, is still present, and developmental work is being done to set up as complete a barrier as possible for these undesirable species of fish. This work is relatively young but indications thus far seem hopeful that some degree of success will be realized. Conditions of existence in fresh water at any given point are changing in a specific direction. This alteration embraces every item of the environment. Small lakes (for example) support vegetation which decomposes, filling their bottoms with decaying material which slowly is transformed into humus. The lakes are thus filled and drained and become swamps and finally dry land. Streams gradually erode their way down to base levels and become meandering and sluggish, with a fine silt bottom and abundance of vegetation. With the changes there is always an almost complete change of animal life.

It has become evident that the environment make-up of a lake controls the particular kind of fish and in what status these fish will be present. In many cases, man can do little to alter the environmental conditions. Alterations have been attempted to control carp with some degree of success. Water level manipulation has been used to reduce the spawning areas and has been used to cause heavy winter kill. Certain warm, shallow, fertile lakes are well suited for carp. Many of these lakes can be managed as carp lakes, and produce a good yield of fish per acre that will add to a farmer's overall farm income sufficiently to make him interested in harvesting and utilizing this crop. The most significant aids in the environmental alterations of our inland waters are soil conservation, pollution control and pollution prevention.

Whether we condone the presence of carp or not, they are here to remain; we would do well to learn to manage and utilize this important part of our fresh water fisheries resources. I would like to close this report with a word of warning on a practice that has been given a great deal of publicity and a lot of discussion in recent years (and one that cannot be taken too seriously)-- that is this: Extreme caution should be taken and careful studies made, before any exotic species of either fish or wildlife is introduced in our country.

MR. COTTINGHAM: Thank you, Mr. Schwartz. As in Indiana, I think most of the states have a vegetation problem in their lakes. We are working on the best method of controling that vegetation now. I would like to call Mr. McEachron, Assistant Director of South Dakota.

MR. McEACHRON: Thank you, Mr. Chairman. Gentlemen: It appears to me that Chairman Swift, in selecting persons to talk on his panel discussion, had made an attempt to get representatives from various states where they had various kinds of conditions. He certainly has done that in selecting this panel to talk on carp control.

The majority of you know that South Dakota is considered an arid state. Therefore, we shouldn't have a great deal to say about carp control, I suppose. It is to be noted, of course, that we do have one main water course through the state, namely the Missouri River, and practically every watershed we have dumps into the Missouri River eventually. We have two sections to that. There is the eastern part of the state, and the northeast corner that borders Minnesota and South Dakota. We have the Minnesota River, which is connected with Big Stone Lake and the Red River of the north, and that is connected with Lake Traverse, and that is the source of our carp and rough fish in the State of South Dakota.

I am glad that I didn't make any intensive research on the history of the carp. I notice that has been done very well by some of the previous speakers here. The only comment I have relative to that is, I notice in connection with the hatcheries where they produced carp many years ago that we have one unusual situation regarding that, and that is in the extreme western part of South Dakota, in our Black Hills area, we have an area there which we now own, and is now our state hatchery, but previously a man owned that, in fact, he homesteaded that. His name was Kleghorn. He used that for the sole purpose of hatching and raising carp. Now, how successful he was in that venture, I don't know, because that is many, many years ago. I am told that was somewhere in the 1800's. But carp is not a factor anywhere in that vicinity, in spite of the fact that that hatchery was there many years ago.

Perhaps when Mr. Blair was talking here regarding the control of carp in the State of Minnesota, he probably included in that rough fish or carp which was taken from our border waters, namely Big Stone and Traverse Lakes. Now, we have a joint agreement with the State of Minnesota where we can contract for the seining of the border waters one year, and the next year Minnesota less the contract. We share in whatever profit there might be in the contracts.

I wish to assure you, Mr. Blair, that many years ago perhaps there were some politicians mixed up with that, but that has been eliminated, and we are not worried about that today. I think probably those rough fish contracts were the source of more investigations a number of years ago than any one thing. All of you who are connected in game and fish work, I am sure, have been investigated, or at least the department has been investigated at some time or another, so I don't feel ashamed to mention the fact that we have. I know that the majority of you are familiar with the facts along that score.

Just to show you how many carp we are interested in during the course of a year in these border waters, in the past two years they have averaged a million and some seven hundred thousand pounds of carp each year. They also have a small buffalo problem in those border waters, and they average 22,600 pounds of buffalo fish taken from those borders waters, as well as quite a large number of sheephead. We have to control those just as well as we do our other rough fish if we are going to keep game fishing for our fishing public.

Now, Mr. Blair mentioned the immense fishing pressure which they have in the State of Minnesota. I know it is true, but we don't have that because we only have some one hundred thousand resident fishermen in our state. So our problem there is very small in comparison to Mr. Blair's, and many of the rest of you. We have some other waters besides our border waters at which we carry on rough fish control in a small manner. That has been largely by contract so far. They take in the James River, and some of our inland lakes, and average about five and six hundred thousand pounds of carp from those waters.

All of our rough fishing is supervised by law by one of our regular game wardens. In certain cases we will issue permits for clubs to set traps and use nets in taking carp in these small streams and smaller lakes. We don't get any of the proceeds from the sale of those fish. There is no profit to us in it. Most of them are disposed of by digging a hole in a field and plowing them under. We still have some of the old commercial fishermen along the borders, and we are glad to give them the opportunity to use the waters and help control the rough fish situation.

I notice he mentioned that game fish had improved where they have been carrying on control methods and measures in the past few years. I noticed in one of our lakes, namely Lake Kampeska near Watertown, where we have carried on carp control there for quite a number of years, taking, as I say, in that and other waters between five and eight hundred thousand pounds a year, we have that lake in such a condition that they have had the best pike fishing there that they have had for the last 10 years. We feel that we are accomplishing something if we can improve fishing to that extent.

I am sure that by keeping up with the controls, even though they be small, that some of us have problems smaller than others, and in cooperation with the sportsmen's clubs and youth organizations, to get them interested in removing these carp for you on a nonprofit basis, we will in time have our game fish out on top. Thank you. (Applause)

MR. COTTINGHAM: Before we go into any discussion, I believe I would like to call on the Assistant Superintendent of Fish Management here in our host state, Mr. Charles Lloyd. I am familiar with some of Mr. Lloyd's work here, and also that of Dr. Schneberger. They conducted me on a tour of tneir carp control and management work awhile back. Mr. Lloyd.

MR. CHARLES LLOYD: Mr. Cottingham, Mr. Chairman, and gentlemen: I have got an advantage here because all these other states have told us what they are doing in carp control, and nothing has come up about what is going on in the State of Wisconsin. I think there is one thing that we all have in common, and that is that carp were introduced into our waters. I have often wondered why they call the carp we are talking about "rough fish." It certainly has had a rough existence. From listening to these various states' representatives, that rough existence isn't abating very much. These other

states are not alone in the fact that they have been investigated as far as this carp situation is concerned. I don't want to go back and overlap on the history, but initially when stocked in waters of the state, carp were placed in 67 of our 71 counties--in some of the waters of those 67 counties. At the present time we do not have a carp problem in 67 counties, because we found, in some water, in the warmer lakes, that carp were able to propagate at a greater rate than in other lakes such as the colder lakes in the northern part of the state.

For a good many years in the State of Wisconsin they handled the carp removal by licensed fishermen. We found that did not control them to the extent that was desired. We talk about carp control. You don't hear any talk about muskie control or walleyed control because those fish are harvested in a different manner, they are harvested by hook and line, whereas the carp does not lend itself to that type, and it is necessary to use different types of equipment. For that reason, we call it carp control.

Be removal of the carp population we can improve the game fishing from two standpoints. One: That the habitat is better following removal, because of the damaging effect of carp, and their rooting up the vegetation and destroying weed beds, and secondly by restoring some of the natural spawning grounds.

We have situations similar to those pointed out by Mr. Blair, from Minnesota, that some of our lakes have gone down to the point where there was practically no sport fishing at all. They might have been called carp ponds, but by intensive removal work we were able to restore weed beds and restore good fishing to those lakes.

For quite a number of years, from 1935 up to the present time, the State of Wisconsin has operated its rough fish removal work through state crews. They worked on a revolving fund basis. Of course, if you are going to operate on a revolving fund system, it is going to be difficult for you to put into effect some of the controls which you should have in effect, such as constructive barriers in streams to prohibit migration of these fish from one body of water to another. As a result, we have continued our removal operations with state and contract crews and the state operations have been carried on through means of traps, and by seining such as has been mentioned here in each of the other states. The taking of carp by spearing isn't too satisfactory, because the amount taken out isn't too considerable.

As I said before, our carp problem does not exist in 67 counties. We find it is centered largely in the southern part of the state where we have a considerable number of large shallow lakes. Now, on the edge of that large concentrated area where we have this problem there are a considerable number of what might be called borderline cases. In those instances, we have, for a number of years, had requests from sportsmen to remove carp because they considered the rough fish to be a problem in certain of those waters, and in many instances we have not been able to carry on the requested removal operations because of the fact that we have had a limited number of state crews.

At the present time we are planning a new type of project. We have additional funds which have been approved by our commission, and we expect to be able to extend our operations to more of the waters of this type. Now, in doing that, we are planning to carry out more of a cooperative program with sportsmen's groups, because, unlike the State of South Dakota, I believe it was, where they said that they tried to interest sportsmen's groups, we have them in this state that are already interested in this carp removal program without going out and trying to get them interested. They are interested in it, and we hear from them.

Now, with those cases, we are setting up one-man crews, with the equipment, that can go out and direct the activities of various interested sportsmen's groups operating under permit to remove carp from some of these borderline waters. Many cases like that may not be what would be considered a carp control problem. We have found that to be the case often when there has been a very limited amount of carp removed, because there were not too many there. In such cases, we consider the problem principally one of public relations and by going out and soliciting aid from the sportsmen in such locations, we believe we are doing more for the problem of public relations than we would do if we went out and tried to handle that operation at more cost to the department by furnishing a complete crew.

Now, I believe a gentlemen from one of the other states mentioned something about the art of propagating carp in Europe and Asia. We do not seem to consider it an art in this country. Perhaps that is the difference in the type of culture from the old world to the new. I would like to point out to you that in the Wisconsin statutes, at the present time, we have a provision that allows hatchery operation for the propagation of carp along the Mississippi River. Now, as far as I know, we do not have any hatcheries operating for the propagation of carp, but, nevertheless, that provision is in our statutes.

In carrying out the operations with the contract fishermen, we have found it necessary that we have more stringent regulations. Up to the present time we have not, for instance, been too strict with the size of the mesh. We have fieldmen at work at the present time checking the size of mesh in the different seines. By going out and test netting the lake to be fished, we can get a pretty good idea of the size range of the rough fish to be removed. In regulating the mesh size in that manner, we are able to assure ourselves that the contract fishermen are going to take the size of carp which should be removed if we are going to satisfactorily reduce the population of the carp in the particular water concerned.

We feel in the State of Wisconsin that we have a number of lakes that do have to have carp removal from year to year, and if the entire operation were to be handled by the state crews it would be, of course, a very expensive and extensive job. If we can enlist the aid of the contract fishermen and the various sportsmen's clubs, we feel that we are fortunate indeed. The time is getting rather short, and I believe that there are probably a number of questions that some of you people would like to ask, so I think with that I will close. (Applause)

MR. COTTINGHAM: Thank you, Charles. The time is short, we have about 10 or 11 minutes left, is there any discussion or question from the floor?

MR. O. L. KAUPANGER: I would like to ask a very specific question. There has been a dogmatic statement made this afternoon that the elimination of carp is problematical or impossible. Has there ever been a study made by anybody or any agency of the government as to what, if any, contribution that the carp makes in the way of food to the desirable species of fish? I am thinking in terms of walleyes, and fish species of that character that are more or less dependent upon other fish life for food. Have any of the states, or has any federal government agency given any consideration to any provisions that carp may make or have made? Everything is in the spirit of detriment to carp. I am not here speaking for carp, but I think it would be rather a tonic if we could ascertain if carp contribute anything to the propagation of game fish; and I would like to know if there has been any consideration given to that particular phase?

MR. COTTINGHAM: I know that in Indiana we have our sucker in our streams, both smallmouth and largemouth, and that seems to furnish the food necessary. Is Dr. Schneberger here?

DR. SCHNEBERGER: Some work has been done on that. The difficulty, however, Mr. Kaupanger, is that the small carp grow so fast they soon grow out of the class where the game fish can feed on them, and there is the food factor that enters into the picture where the small carp compete for the food with the smaller game fish species.

MR. KAUPANGER: Let me ask you this, Doctor: With the elimination of suckers and other vegetarians that were natives, has there ever been any study made to ascertain whether or not the carp compensated in that sense? I am trying to find out, Doctor, if it has been dogmatically established that we are going to have carp.

DR. SCHNEBERGER: Suckers are a good forage fish for game fish and in Wisconsin we do consider them as an asset for game fish species. However, while some of the carp do furnish some forage, but the fingerlings grow so rapidly that there is only a limited time when the small carp are used for forage and consequently their value in this respect is very limited.

MR. KAUPANGER: I am not here to speak for carp, but I happen to live on a lake that is condemned with carp, and has been condemned with the use of the dredge since 1886 and 1888, and this lake is fished by no less than two hundred thousand people a day. The take is mostly bass and crappies and sunfish. The question arises in my mind, and I am not professing to speak dogmatically, but it is my personal opinion that carp are in there now in excessive numbers, and they have been an aid, rather than a detriment to that particular lake. That lake has 242 miles of shore line. It has 178,000 people by the last population count. It has over 12,000 boats on that particular lake. I have been in conservation work for more than 30 years, and I have heard a lot of detrimental talk about carp, but I still do believe we are not approaching carp fundamentally, and I am wondering if it is accepted now that the dogma is this: That you cannot rid a lake of carp.

MR. COTTINGHAM: I don't think you have to worry about the carp situation. I think it will take care of itself.

MR. MALAHER: Mr. Chairman, in Manitoba we now have carp in Lake Winnipeg. It might be interesting just to mention the fact that in the history which Mr. Blair gave of the control on this continent, that in the year 1886, the State of Minnesota formally offered the Province of Manitoba a present of some carp. The matter was very carefully debated in the Manitoba legislature that year, and was regretfully declined, due to the fact that Manitoba did not think it proper to accept them.

The most recent increase of carp has been involuntary, of which we are not very pleased. We have a lot of marsh land, and we are concerned about what is going to happen to vegetation. I know we can't take more time in this meeting, but if anybody has any experience in the handling of carp in marsh waters, I would very much like to have him get in touch with me sometime during this convention. Thank you.

MR. COTTINGHAM: If there is someone here with the same problems, would they please get in touch with Mr. Malaher from Manitoba?

MR. BLAIR: I think there are certain similar amounts of wet marshes in Minnesota and Wisconsin here where the boys could offer you some help.

MR. COTTINGHAM: It is up to 4:30 right now, so I believe we had better turn the meeting back to the permanent chairman.

VICE-PRESIDENT LEAHY: I wish to thank the members of this panel for the fine contribution and for the efforts that you have made on this matter of rough fish. I also wish to thank Mr. Hoffmaster and Mr. Gilbert. Tomorrow we are going to have a very interesting discussion on our water resources by Commissioner Wilson of Minnesota.

...The convention adjourned until 9:15 o'clock A. M. of the following day...

TUESDAY MORNING SESSION - JULY 25, 1950
(General Chairman - President Ernest Swift)

PRESIDENT SWIFT: As usual, we are late on the second morning, so without any further ado, I think we had better start, although some are still eating breakfast. We have quite a heavy program this morning. Yesterday morning, you will recall, we talked on some of the national phases of federal legislation and the valley authorities. This morning we are following it up with another national program, and I have chosen a man who, in my opinion, is extremely confident to analyze this subject on both a state and national level. He has put a lot of time on it for the International Association, and has devoted a great deal of his own time. I will now introduce Commissioner Wilson, of Minnesota, who will discuss the Water Use Problems and Wildlife Values. Mr. Wilson. (Applause)

MR. CHESTER S. WILSON: President Ernie Swift, members of the Association, and guests. First I want to say what everybody has been thinking of here, and that is how Ernie and his gang have gone all out on the job in putting on this record breaking convention, and it gives us all a big lift to see how it has put new life in this organization. (Applause)

Now, when he handed me this package, I thought right away about the story of the fellow down in the southern country church that went up after the sermon and said, "Parson, what is the meaning of them words 'status quo' you was talking about?" The parson said, "Sam, that means the mess we is in." That is exactly what the situation is here.

A Program of Action

In grappling with this subject our aim is to lay out a program of action that will go as far as possible to remedy past blunders and promote better conservation of water and wildlife resources in the future. I am not so presumptuous as to think that I can cover here all the angles of this broad field of water and wildlife conservation. I shall, therefore, limit my remarks to sizing up the major factors of the situation as they appear to a conservation administrator, and shall leave it to others to develop further details in the general discussion which will follow. In preparation for this discussion I wrote to all the state agencies affiliated with this Association as well as some federal agencies, asking for information and suggestions.

The response was amazing. I received enough source material on this subject to fill a large book. This shows how conservationists are aroused to the need for better management of our water resources. To all those who contributed I express my sincere thanks. As I go on they will see that what I have to say is largely stolen thunder with a few of my own comments interspersed. The material sent me included a wealth of first hand information and many valuable ideas which I shall not have time to touch upon. I hope that some of these may be brought out in the subsequent open discussion.

Main Objective--Human Welfare

Let us see first where we stand and what we are driving at fundamentally. If this were a convention of ducks and fish the answer would be easy. We would want man and all his pernicious works wiped off the face of the earth so that we could have our watery homes as they were in the primitive state of nature. However, we happen to be human beings, and we are naturally going to manage things for our own benefit as far as we can. Therefore the first basic rule which should govern all our actions in this matter is that every water and wildlife conservation program or project should be planned and judged according to its ultimate effect on human welfare. Obviously, that rule should apply to all other public activities as well. There is a lot of fuzzy thinking on this proposition, and it would be well to get it cleared up before we go any further.

Extremists on Both Sides

There are some extremists who denounce all land drainage, all power dams, and all other water development projects, because these manifestations of civilization have ruined a lot of wildlife habitat. True enough, but as one of these well meaning critics enters his home, eats his meals, wears his clothes, turns on the electric light, reads his newspaper, and enjoys a multitude of modern necessities and conveniences, he is sharing in the benefits of the very water exploitation which he condemns, and thereby becomes a party to the crime. If all modern agricultural and industrial developments that encroach upon wildlife habitat must be dropped to satisfy the longings of those who want nature left in a state of absolute virginity, man would have to abandon civilization and revert to a state of savagery.

Exploitation vs. Recreation

On the other hand, the past record of our so-called civilization presents a sorry picture of ruthless disregard for wildlife and other important recreational values in the planning and exploitation of a vast array of drainage and irrigation schemes, flood control or navigation works, power dams, pollution from cities and industries, and other human activities affecting waters. The promoters of these activities had better remember that man does not live by bread alone. Recreation, especially outdoor recreation, is essential to the fullest enjoyment of living, and the most popular and beneficial forms of outdoor recreation are fishing, hunting, and nature study. Today over fifteen million people annually buy fishing licenses, over twelve million buy hunting licenses, and a considerable number of privileged or perhaps underprivileged characters hunt and fish without licenses. According to duck stamp sales over two million hunters annually go after waterfowl. A large army of both sexes, old and young, go out with cameras, field glasses, or no equipment at all to get next to nature in all her varied forms. So the promoters of water exploitation projects who think only in terms of crops, kilowatts, and commercial production had better heed the fact that a great and growing segment of our population demand recognition of recreational values in connection with water development projects.

Commercial Returns from Protected Water Areas

There is also a substantial commercial return from properly protected water areas through the harvesting of commercial fish and aquatic fur bearers.

Aldo Leopold, Conservation Evangelist

Here let us stop a moment to pay tribute to the late Aldo Leopold, rightly called the Dean of the Wildlife Management Profession. He was in truth a great evangelist of conservation. He continually stressed the fact that man is subject to the laws of nature, and that if he does not play the game according to nature's rules, he is bound to lose out. Aldo Leopold was an ardent hunter and fisherman, but he was an even more ardent explorer of nature's mysteries. Through his research and his writings he opened the door to a fascinating field of adventure for those who wish to learn the secrets of the endless chain of life. He declared that as civilization presses harder on wildlife and other natural resources, it is imperative for us to find ways of enjoying those resources without destroying them. To that end we should put more emphasis on nature study and less on hunting and fishing. Those who have not read Leopold's fascinating and thought-provoking book, "A Sand County Almanac", written shortly before his death, should lose no time in doing so.

Pulling Together

Getting back to water problems, we find that some of us pull oars on one side and some on the other, but we are all in the same boat. The agricultural and industrial promoters on the one hand and the conservationists on the other must learn to pull together for the common good in all water use projects. So the second basic rule that should govern all water developments is that all the different interests affected should be given fair consideration in proportion to the related public needs and benefits. That, of course, is easier said than done, because different interests are often in conflict. The mess we are in with regard to waters, wildlife and all other natural resources is due mainly to the fact that too many programs and projects have been promoted by aggressive pressure groups, with little concern for other interests, for the general public welfare, or for the long run consequences of the schemes.

Basic Rule for Water Development

To remedy past mistakes and to plan soundly for the future, we must find means to apply in practice the foregoing principles, which may be condensed into the following fundamental rule:

Every water use program or project must be based on the determination that the ultimate benefits in terms of human welfare will be commensurate with the cost, and that all interests now or hereafter affected will be given due consideration.

Coordination Among Different Agencies

In this connection it is important to secure coordination among the different public agencies--federal, state and local--concerned with related water and wildlife problems, in order to reconcile conflicting interests and prevent duplication and overlapping of work. Past disregard of this requirement has resulted in the waste of vast sums of public money, which if properly applied, would have paid for an immense amount of worthwhile conservation that is desperately needed.

Methods of Planning and Coordination

Sound basic planning and coordination of projects affecting waters and wildlife can be assured in two ways:

(1) By cooperation,

(2) By exercise of governmental authority.

Voluntary cooperation should be sought first in all cases. However, human nature being what it is, we cannot safely depend on cooperation where there is any serious conflict between different interests. Therefore, in every field of water and wildlife development where the effects extend beyond the immediate scope of local units, there should be an agency with adequate power to enforce the rules requiring recognition of all public interests affected, to insure coordination, and to safeguard present and future public welfare. We have some such agencies now at various levels of government, but there are many important fields of activity which are not under good control.

Representative Control and Coordination Agencies

This leads to the question, how should existing agencies be strengthened and what new agencies are needed to provide adequate control and coordination? The different fields of water use in relation to wildlife present various special problems, but before proceeding to consider them, we can lay down certain general propositions that apply to all. First is the rule that every control agency should be so constituted that it can give fair consideration to wildlife and recreational values as well as to all other interests affected, now or in the future. In short, such an agency must have both the broad view and the long view.

Our Debt to Posterity

Here let us say a special word for posterity, because they cannot speak for themselves. In building our present prosperity we have consumed, wasted, and destroyed a large part of the heritage of natural resources that belong to all generations. Present and past generations have literally lived on the fat of the land, leaving our descendants to pick the bones. We owe them a heavy obligation to restore as much as we can of the shortage for which we are responsible, so in appraising the benefits of all programs and projects in relation to costs, we should give double weight to the interests of future generations. Where work is needed to replenish and perpetuate depleted resources (for example, restoration of denuded or eroded watersheds), we should shoulder the cost without hesitation, even though the benefits may be deferred beyond our time.

Levels of Control and Coordination

Another general rule that should govern procedure for control and coordination of resource development projects is that the authority should be applied at the lowest governmental level at which it will be effective. State and local agencies should serve in all cases where they can and will do the job, leaving to the federal government only such functions as involve a definite national interest and cannot be effectively performed at the lower level.

Furthermore, existing agencies should be used wherever possible, with such changes in organization and such strengthening of authority as may be necessary to make them effective. New agencies should be created only where adequate existing agencies are not available. Superfluous existing agencies should be eliminated or merged with others better suited to perform the necessary functions. This of course, touches the whole problem of government reorganization which has engaged the attention of the federal Hoover Commission, as well as some state commissions. We have one working now in Minnesota. However, time does not permit a digression here into that complicated field, which has been assigned to other parts of the program.

Specific Water Use Problems

We turn now to the specific fields of water use and development which affect wildlife directly or indirectly. The major problems in that category include the following:

(1) Land drainage
(2) Irrigation
(3) Flood control
(4) Navigation improvements
(5) Hydro-electric power developments
(6) Pollution
(7) Wildlife habitat improvement

Where are the weak spots in the line of planning, coordination, and control of these activities, and what must be done to reinforce them?

Land Drainage

At the moment land drainage is the hottest problem in the whole field of water management. Conservationists charge agricultural agencies with wholesale destruction of wildlife habitat through improvident drainage schemes. The agriculturists deny the charge and assert that their drainage projects are necessary for good land management, and are beneficial to wildlife. The truth is somewhere between.

There is no question but that in earlier years large sums of money were wasted in fruitless efforts to drain large bog areas in the northern lake states and other parts of the country. Much valuable aquatic wildlife habitat was ruined in the process. There were some places (as we can show in the Red Lake region in northern Minnesota) where the drainage improved wildlife habitat, but in the main the results of the old, large-scale swamp drainage projects were bad for wildlife and disappointing for agriculture. State and federal conservation agencies are busy in many places with wildlife restoration projects designed to undo the damage of the old drainage schemes.

All this drives home the point that to prevent a repetition of past mistakes and insure consideration for wildlife and other public interests in connection with future drainage operations, reviewing agencies with appropriate powers should be established at the state level. Most of the present state or local agencies having drainage functions (such as courts, drainage or conservancy districts, county boards, town boards, etc.,) are not constituted to give proper recognition to wildlife or other public interests because their background is mainly agricultural. Some new element must be introduced to insure consideration of wildlife and other public interests. In Minnesota we have taken a step in that direction through the provisions of our water conservation act and drainage code, giving the Conservation Department broad powers to protect public lakes and streams against drainage or other interference,

also requiring that notice of all public drainage projects undertaken by counties or other local agencies be given to the Conservation Department so that the soundness of the hydraulic features may be checked up. These provisions do not completely meet the need for recognition of wildlife and other public interests, but they do help materially to hold the line against unwise drainage schemes, and they provide the basis for development of more effective measures.

Cooperation with Farmers

In working out provisions for adequate control and coordination of drainage operations for the benefit of wildlife and other public interests, it is important to secure the cooperation of farmers and to avoid antagonizing them. This is not the place for discussion of all the troublesome angles of farmer-sportsmen relations. It is enough to remind ourselves that farmers own a large part of the wildlife habitat of the country, and that we are dependent on them for supporting the major portion of the wildlife population. Moreover, farming interests usually hold a commanding position in the legislatures of most states where drainage is important, and they have a powerful voice in Congress. Therefore their cooperation, or at least their approval of all measures taken for the benefit of wildlife and other public interests, is essential.

It is not to be expected that the farmers will concur in giving an absolute veto power over drainage projects to any conservation department or other wildlife conservation agency. However, it should be possible to sell farmers on measures that will at least require a reference of all drainage projects for study and recommendation to some agency that is competent to pass on wildlife and other public values that may be affected.

The sound approach to wildlife management on the farm has never been better stated than in the following quotation from Aldo Leopold's game management policy, set forth in the report of a committee of which he was chairman some years ago:

> "Recognize the landholder as the custodian of public game on all lands other than public lands, protect him from the irresponsible shooter, and compensate him for putting his land in productive condition; compensate him either publicly or privately with either cash, service, or protection for his land, and for his labor on condition that he preserve the game, feed, and otherwise safeguard the public interest. In short, make game management a partnership enterprise, to which the landholder, public, and sportsman each contribute appropriate service and each derive appropriate rewards."

Drainage of Pot-Holes and Small Marshes

The hottest water management controversy in Minnesota and neighboring states revolves around the drainage of pot-holes and small marshes. These are mostly small projects on the lands of individual farmers, but in the aggregate they eliminate a lot of water, including valuable aquatic wildlife habitat. However, it is not safe to say that all drainage of pot-holes or marshes is bad from the wildlife standpoint. Undoubtedly much of it is harmful, but in some cases it is beneficial. The fact is that the total effects of such drainage on wildlife have not yet been appraised or estimated with any degree of accuracy. Statements of total land acreage drained do not necessarily reflect the impact on wildlife habitat. Much more field investigation and research is needed in order to get a true picture of the results of pot-hole and marsh drainage.

It is certain that nothing will be gained by exaggerated or highly colored statements about the damage done to wildlife by draining marshes or pot-holes, or by berating the farmers for such drainage. In most cases the farmers own the land affected and have a perfect legal right to drain it as they see fit, in order to facilitate cultivation and enlarge their crop acreage. A farmer is under no more obligation to wildlife interests to leave undrained a pot-hole that is useless or troublesome to him than a city sportsman would be to give up a piece of his front yard without compensation for a public street improvement. Furthermore, as already indicated, it is not good policy for sportsmen to bite the hands that feed most of their game. Hence, in all discussions of this subject, wildlife conservationists should make it clear that they are not shooting at the farmers.

Federal Aid for Farm Drainage

However, behind the farmer there is a legitimate target for criticism in the farm drainage field. I mean, of course, federal aid for local farm drainage. Such aid is dispensed through two channels: The Soil Conservation Service and the Production and Marketing Administration. The soil conservation service provides farmers with technical assistance in drainage projects, lends them equipment in some cases, and provides them with a limited amount of tree and vegetative planting stock. Through their regulations and practices the SCS personnel give the interests of wildlife a large measure of recognition in connection with farm drainage projects, endeavor to dissuade farmers from drainage that will be harmful to wildlife, and in some cases (such as where open water areas which are important for waterfowl habitat are affected) they refuse to give the farmers assistance. Some of the drainage projects supervised by the SCS may impair wildlife habitat, but I think it is fair to say that such damage is far outweighed by the great amount of improvement to wildlife habitat resulting from the SCS program as a whole. Farmers are bound to drain more or less land on their own initiative, and undoubtedly they would thereby do a lot more harm to wildlife than they do under the guiding and often restraining hand of the SCS. On the whole I do not think the evidence warrants charging the SCS with any very heinous crimes against nature in connection with the land drainage program.

The same cannot be said for the PMA. They pay cash subsidies to farmers for drainage under the guise of soil conservation practices. There is little or nothing in their regulations that manifests any special concern for wildlife. In those cases where the drainage subsidized by PMA is supervised by SCS, some consideration may be given to wildlife values. However, there is no question but that a large amount of drainage that is definitely detrimental to wildlife has been undertaken with the help of cash subsidies from PMA.

In the face of the huge agricultural surpluses that have piled up in recent years there is no sound reason for the taxpayers of the nation to pay farmers to drain in order to put more land in cultivation. Before those subsidies were conceived it was taken for granted that drainage would pay its own way. Well-planned drainage makes a farm land more productive, and the farmers can well afford to pay for it. If the drainage does not increase the productive value of the land enough to balance the cost, it should not be undertaken.

At any rate, we are now faced with a bewildering mixup under which one agency of the federal government, PMA, in the Department of Agriculture, is paying farmers subsidies for land drainage without sound economic justification, another branch of the same department, SCS, is encouraging drainage by advice and supervision, and a third federal agency, the U. S. Fish and Wildlife Service in the Department of the Interior (with the cooperation of state conservation agencies), is trying to undo the effects of abortive drainage schemes through marsh restoration projects. In this madly scrambled situation wildlife habitat, in spite of our efforts at restoration, is still losing ground.

To counteract this and to put an end to wholesale economic waste, Congress and the Secretary of Agriculture should be urged to stop all cash subsidies for farm drainage immediately. Or, if the agricultural system of the country has become so accustomed to the intoxicating stimulus of subsidies that it cannot suddenly dispense with them, the federal powers should at least try to reduce the detrimental effects of the dosage by limiting payments for farm drainage to those cases where sound planning and due consideration for wildlife values have been assured through supervision either by SCS or by some comparable state agency.

Let us hope that the day of effective reorganization, as recommended by the Hoover Commission or its task forces, is not too far off, so that the shocking state of confusion that now exists among agencies of the same government pulling at cross-purposes will never occur again.

Irrigation, Flood Control, Navigation Improvements, Hydro-electric Power Projects

When we enter the realm of irrigation, flood control, navigation improvements, and hydro-electric power projects, we are getting into deep water where large-scale federal enterprises have run amuck. Here again we have witnessed in past years the sorry spectacle, on a much larger scale than in the case of land drainage, where different federal construction agencies have pulled at cross-purposes, have competed for public support and congressional appropriations by seductive multiple-use schemes and other questionable methods, have spent immense sums on projects of doubtful soundness, and have disregarded wildlife values and other public interests in favor of influential pressure groups bent on contrary objectives.

It is fair to say that the situation has greatly improved in recent years under the persistent driving of organizations like this and other conservationists throughout the country. As a result of these efforts Congress passed the Wildlife Co-ordination Act, Public Law 732, and other measures designed to secure better consideration for wildlife, recreation and other public values affected by water development projects. A notable example of the benefits of this movement is the increasing consideration given by the Corps of Engineers and the Bureau of Reclamation, through the Missouri Valley Inter-agency Committee, to the findings and recommendations of the river basin studies unit of the U. S. Fish and Wildlife Service. We of the Upper Mississippi Valley states can testify that in our area the Army Engineers are making a sincere effort to give wildlife and recreation all the breaks they can under the limitations imposed on them by their superiors or by Congress. In other parts of the country with which I am not familiar the situation may be as good or it may be worse.

At any rate, even with all the progress that has been made under the Wildlife Co-ordination Act and other progressive conservation measures, we are still far from complete success in achieving the degree of co-ordination and control over large-scale federal water development projects that is necessary for full recognition of wildlife and recreational benefits and other public values. The only effective way to attain that objective is to provide reviewing agencies with adequate powers as before described.

Public opinion is divided as to the best method of solving this problem. On the one hand the Army Engineers, the Bureau of Reclamation, and other federal construction agencies, jarred by the fear that their wings may be clipped, have hastened to bury their hatchets and join in co-operative programs--notably the Pick-Sloan plan in the Missouri basin. On the other hands extremists propose great valley authorities as the magic panacea for all the ills that beset the problems of resource development. Such authorities are objectionable because they would usurp a large segment of the field of self-government that properly belongs to the states and local units, and would be open to abuses that inevitably follow the concentration of power. In many respects these ambitious valley authority schemes go far beyond the real need for co-ordination and control or for proper resource development.

However, it is clear that in order to serve and safeguard all the important public interests concerned, whether involving wildlife or other resources, reviewing agencies equal to the task must be provided somewhere. The Hoover Commission and its task forces recognized the problem and made specific recommendations, differing in some particulars, for broad-scale, representative reviewing agencies. Let us hope that through the adoption of some such measure an early solution may be found.

Appraisal of Benefits in Relation to Cost

Besides the basic need for co-ordination and control for water development projects, the methods of appraising benefits in relation to cost deserve consideration. The general rule is well established that no project should be undertaken unless the prospective benefits at least equal the cost. There is much to be said in favor of requiring a higher ratio of benefits to cost, especially in those cases where benefits are difficult to estimate or long deferred. However, as stated before, we are under obligation to future generations to restore their heritage of natural resources which we have depleted by past abuse, and in that connection we should not be niggardly about paying the cost, though we may never live to reap the benefits ourselves.

There is need for correction of an abuse that has sometimes crept into the appraisal of benefits in past cases. That is the practice of using wildlife or recreational benefits as a makeweight when other benefits are insufficient to justify the project. In some cases wildlife or recreational benefits have been used as a false front for projects that were essentially commercial.

Special Yardstick for Wildlife or Recreational Benefits

To correct such abuses it has been proposed that wildlife or recreational benefits from the public standpoint should not be measured in money but in terms of desirable effects and the number of people who will participate. Due allowance for such benefits should be made on their own merits. They may be of incalculable value, and may alone be sufficient to justify a project, but they should not be lumped in with commercial benefits on a financial basis.

Of course, where a water development project will produce commercial returns through stimulation of tourist trade or other business, such benefits may be estimated in money, but they should be ascribed to those who will reap the gains, and not confused with public benefits. This raises the question as to how far the government should go in financing projects that will mainly produce commercial benefits for special interests, and whether such interests should be required to reimburse the government. Time does not permit further comment on that point.

A score or more of years after the first college-trained wildlife management specialist received his diploma, we still have one major federal agency and 48 state conservation departments to absorb the output. To the U. S. Fish and Wildlife Service may be added the Soil Conservation Service, the National Park Service, Forest Service, and the Army Engineers, but those agencies employ only a relatively small number of wildlife technicians. The annual turnover is not rapid, and the future expansion of wildlife activities by these agencies is not expected to be large enough to absorb many of the draduates who will be seeking employment soon.

It is true that a few private organizations employ wildlife technicians, but again the picture is about the same. How can a profession with such a relatively limited number of employment possibilities possibly handle nearly 400 new research biologists each year? The answer is obvious--but in that question lies a key to the whole problem.

Wildlife management is more than research biology. How many men could the state agricultural colleges place today if all their graduates planned only to engage in research? Yet that is the one field in which the majority of wildlife students now expect to enter when they finish their schooling.

Part of the blame may be laid at the door of the colleges and universities for the emphasis on research; much of it lies in the historical fact that the Pittman-Robertson Act came into being when the wildlife management profession was coming of age. In 1935, we had the money to launch sweeping programs, and we had relatively meager knowledge upon which to base projects. Research was essential then, it is equally necessary today. But for every available research specialist then there were many jobs. Today the situation is quite different.

Again, I wish to emphasize that wildlife management is more than research. Research is the basis on which the profession is built, but it is far from being the whole structure. It is biology, botany, agriculture, range management, forestry, animal husbandry, veterinary medicine, law enforcement, administration, public relations, and a dozen other activities. If the colleges emphasize only one facet of this many-sided profession, they are doing themselves and their students an injustice. This is especially true now and it will become even more evident as time passes.

On the other hand, I came close to being a dissenting member of the Employment Committee of The Wildlife Society. To me, the picture is not entirely black. There will be many openings each year for college graduates trained in wildlife management. The professional "wildlifer" is no more immortal than any other human, and death inevitably will create some openings for newcomers. Retirement will make additional positions available in state and federal agencies. In the past, death and retirement, in relation to other professions, have not been an important factor in personnel turnover. Fifteen years ago the profession was young, and most of the technical workers were youngsters just out of college. Today some of these men already are looking forward to the time when they can relax along a trout stream. Because of the gratifying development in the profession itself, the turnover is certain to be more rapid in coming years.

Promotions are creating other openings. A few years ago, it was difficult to find a college-trained wildlife specialist in state administrative positions. Most of the college boys were down in some subdivision of the department counting pheasant eggs or the pin feathers on mallards. Today, many of the technicians have worked their way into top administrative posts.

The constant pressure by state wildlife federations, Izaak Walton League Chapters, and other forward-thinking sportsmen's organizations gradually is forcing state legislators to remove conservation departments from the realm of petty politics. More and more of the states are selecting men on the basis of training and ability rather than because they married the governor's niece or the sister of a precinct committeeman. As trained wildlife men acquire influence and are placed in positions where they can choose men to work under them, they surely will select individuals who are qualified to fill such vacancies.

During the past few years there has been a gradual broadening of the requirement horizon as seen through the eyes of the educator. It has not been long since nearly all emphasis was on research. Today, more of the college professors and heads of wildlife departments are giving their students broader training. They realize that there still are employment possibilities that have not been tapped. The surface of the enforcement field, for instance, has not been scratched.

The job of State Game Wardens, as interesting and important as it is, has not been too appealing to many of the boys. Even in those departments where the warden staff has reached a high degree of efficiency there has been a tendency for the college man to look down on this position. Why spend a couple of thousand dollars and from four to eight years in college for a job which has required only a high school diploma or two years of college credits?

College graduates should take a better look at the employment opportunities and possibilities for advancement in the enforcement branch of state conservation departments. Standards already have risen and will continue to rise in this essential field. There are are about as many former game wardens in top posts in the profession as have risen from the ranks of the research branches.

Real conservation officers must be more than policemen. If they do the job as it should be done, many violations will be prevented. No employees of a conservation department can make or break a program more quickly than those on the enforcement staff. Regardless of how efficient the research program may be, no matter how many pheasants are stocked, and no matter how many resolutions are passed by the commission, a couple of surly, ill-tempered, tyrannical, or dishonest wardens can destroy all public faith in the department. Fortunately, such men are rapidly being weeded out of most departments and are being replaced with those who can enforce the regulations without antagonizing law-abiding sportsmen. Moreover, if college teaches a man anything, it should be tact, courtesy, resourcefulness, and the ability to get along with people. These are the same qualities that make a real conservation officer.

Law enforcement positions offer both opportunities and a real challenge to college men. The work is fascinating and diversified and the standards are being elevated at an accelerated pace. Men entering this field with the additional advantages of college training are certain to be regarded by their superiors as potential leaders. Four years of college training certainly will not be wasted since anyone who has had contact with a warden staff knows that enforcement is only one of the many duties. Wardens are called upon to take game censuses, assist in making food habits studies, in operating live-trapping and transplanting programs and many other activities that really should be performed by trained men. The ordinary game warden must learn to do these things under careful supervision, learn the hard way, or do a poor job. The college-trained conservation officer can take such duties in his stride, and can merit recognition.

Conservation officers usually are expected to address sportsmen's groups and broadcast over local radio stations. Because of past training, the college man should have the advantage in all aspects of the public relations program.

Let no young technician feel that he is above the job of game warden. Unless the wardens, who are in constant contact with the sportsmen, make a favorable impression and perform their duties in a creditable manner, all the progress made by the research or technical branches may be ignored. The local warden, the one man in the entire department whom the average hunter and fisherman knows by sight or by name, holds the most important job in the whole organization.

Another branch of the profession that offers splendid opportunities to the trained wildlife man is the field of public relations and education. Many of the colleges are recognizing the need for men who can translate scientific findings into language that the man with the rod and gun can comprehend without consulting a dictionary. The failure of some of the better state and federal programs can be attributed to misunderstanding. Some scientists can talk about biotic potentials, transects, and ecology all day, and the words bounce off the skulls of most laymen like hail off a box turtle. What we need, and what we are gradually getting, is a group of men who know what the scientists are talking about and who can tell the story in language that the sportsman understands.

Some colleges now are giving simultaneous training in wildlife management, journalism and public speaking. Many schools require that all candidates for a degree take elective courses in writing or speaking. This is another field which has not yet been exploited to the utmost by those seeking employment. The Institute is in close touch with all the state and federal agencies dealing with natural resources, and during the past year we frequently were asked, "Who would you recommend for a research job that we have open?" With public relations, and there were several such requests, the qualification was "The applicant must be able to handle this special assignment." Jobs are available in this field, and the number will continue to increase.

A glance at any of the national sporting magazines reveals that the professional wildlife men are beginning to be recognized by editors. Those who have something to say and know how to write in common terms are selling manuscripts regularly. For many years, we had a group of writers who got their dope from the wildlife technicians, wrote things which they themselves did not understand, passed the yarns on to magazines, and pocketed a fat check. Quite often the articles contained misquotations and errors. Today many "wildlifers" are writing their own stuff, pocketing the remittances themselves, and are presenting accurate material that cannot backfire on either themselves or the publishers.

An increasing number of full-time outdoor writers are being employed by the newspapers and large circulation periodicals over the country. The only serious competition in this field lies in the relatively few competent and enterprising professional writers who, starting only with the ability to write, have learned enough about their subject to handle it intelligently and accurately.

The only limit in public relations is individual ability, energy, and resourcefulness. National magazines, newspapers, radio, television, industries dependent upon field sports, civic groups, and others offer opportunities to the right men.

Certainly the picture is not as black as sometimes painted. The incompleted survey of the schools having Cooperative Wildlife Research Units shows that of the total students graduated at the end of 1949, 78 per cent of 694 B.S. men, 87 per cent of the 239 M.S., and 96 per cent of the 28 Ph.D's were doing all right. We do not have final returns yet but most, nearly 74 per cent, of those who graduated from these colleges this spring appear to have found positions, and openings still are available in some states for the right men.

It is quite likely that, if the colleges continue to turn out their present large numbers of graduates, a true saturation point ultimately will be reached unless another unforeseen blessing like the Pittman-Robertson Act provides for additional program expansion. There are several thousand inadequately trained men in the enforcement staffs of the state conservation departments and those jobs will be more attractive as other positions become more scarce. As more trained men get into this field, the standards will be raised even more.

Graduates of wildlife schools have had it comparatively easy in the past, and a little surplus of job applicants is a healthy situation. Perhaps things have been too easy. How many professions can you name where employers stand in line to grab graduates as soon as they have been handed their diplomas? Few, if any. Legal firms may snatch top men in graduating classes of the better law schools, but there are plenty of lawyers selling real estate and, probably, vacuum cleaners. Graduate engineers are operating filling stations, and although engineering jobs are more numerous than those in wildlife management, there are many more and many larger engineering schools than colleges of wildlife management.

Competition for jobs within the next decade undoubtedly will become more rugged, and not every man who receives a degree can expect to be placed in a job of his choice immediately after graduation. Keen competition makes good business. Competition is what separates the men from the boys and the wheat from the chaff in all walks of life. It is not going to harm the profession of wildlife management if, during the next few years we are able to absorb only the top two-thirds or one-half of the members of each graduating class. I, for one, would like to see more conservation-minded people working in other types of business and industry. We could use more widespread support, cooperation, and public understanding. Thanks.

PRESIDENT SWIFT: Thank you. I think that is a very outstanding paper, Mr. Gutermuth. I would like to call for comments, but we are running short of time, and we still have another subject to cover. Thank you very much. (Applause)

PRESIDENT SWIFT: We have had requests, gentlemen, for information as to how we run our Wisconsin Conservation Congress. We are not trying to sell this to anybody, but in view of these questions, I have asked the Chairman, Mr. Richard Hemp, who is the Chairman of the Council and our Congress, to give us a little background on how this is operated. Mr. Hemp.

MR. HEMP: The present six-man Wisconsin Conservation Commission was created in 1927 by legislative act. But it was not until 1933 when the Commission was delegated the authority by the legislature to establish open and closed seasons for the taking of fish and game, size limits, bag limits and related regulations.

In ridding itself of the time-consuming process of establishing wildlife regulations by legislative act, the legislature nevertheless left the string attached.

Wisconsin as a state is very much conscious of public participation in government, and the various commissions which are empowered to make regulations of their own, subject to approval by the governor, generally must run a gauntlet of public hearings. The conservation commission found itself no exception.

Section 29.174 of the Wisconsin Statutes, for example, provides that a thousand petitioners can demand a public hearing on a contemplated fish or game order affecting the state, one hundred petitioners can demand a hearing where two counties are affected; while only fifty petitioners are needed to ask for a hearing where one county is affected.

The same statute, also authorized the commission to organize advisory committees, "to advise it in any matters under consideration." Out of this combination of legislative directives, the Wisconsin Conservation Congress was born. To forestall being harassed with petitions for public hearings, the commission very early under its new-found authority sponsored public hearings in each of the 71 counties of the state, said hearings dealing with proposed fish and game regulations for the ensuing year. Such hearings are now held the second Monday evening in May each year, generally in the county seat or at a point centrally located.

Besides the public hearing, at which any resident of the county can make an appearance, another important function takes place on this annual occasion. That is the election of a committee of three delegates and two alternates, who will represent the county in the Wisconsin Conservation Congress. A county delegate is now elected for a term of three years, and no municipal unit of the county can have more than one representative.

The Congress, made up of 71 county delegations, thus becomes an advisory committee of the whole to the Wisconsin Conservation Commission. A state-wide meeting of the congress follows a month after the county hearings. At the state Congress, usually lasting two days, the recommendations of the various county hearings are correlated and unified, and a complete set of regulations dealing with hunting and fishing seasons of the year to come is presented to the Commission as being the recommendation of its advisory body, the Conservation Congress. These recommendations are arrived at by majority vote, with each county being credited with one vote, casting it either for or against on questions coming upon the floor.

I might state here that between 90 and 95 per cent of Congress recommendations over the years have been enacted into official regulation by the Commission. The Congress meets but once a year in general assembly. However, the 71 counties are divided into 11 districts and the county committees of a given district elect two committee members annually to serve one-year terms on the Executive Conservation Council of the Congress, which functions as the parent body's executive committee throughout the year. The 22 members of the council in turn elect each year, a chairman, vice chairman and secretary-treasurer, who serve in similar capacity for the general organization.

The Council meets at least four times a year, sometimes five. It meets with the commission in July, when the game season order is generally enacted in Wisconsin, and again in August or September, when fishing regulations are adopted. In addition to those meetings, the council meets in mid-winter and again in spring. It also meets preliminary to the general Congress meeting in June.

The status of the Congress as a coherent and functioning organization was given tremendous impetus three years ago when study committees were first set up. These committees are made up of members of the Congress and have as leaders two members of the Council. Membership varies from five to seven.

The chairman are appointed by the Council chairman, subject to the approval of the Council, and the committee leaders chose their own committees again subject to the approval of the Council. Committee members are generally selected on the basis of interest, intelligence and enthusiasm. Geographical location is also a consideration, for uniform distribution is desirable in a state-wide committee. In order to qualify as advisory committees, these groups must also meet the approval, as a final step, of the Conservation Commission. No member of the council or of these committees receives a salary or reimbursement of any kind, except such necessary expenses of food, lodging and travel which may be incurred in official capacity. The conservation director assigns to each committee one or more departmental specialists, who possess the necessary information and factual knowledge to answer questions which may arise.

Prior to the county meetings in May, each committee issues a written report on its findings of the past year. These reports go out to each member of the Congress. At the present time such study committees number eight and deal with the following subjects: Big game (deer and bear), waterfowl, fur, upland game, trout, fish, education and public relations, and water resources. So much for the mechanics of Congress operation. Now let's evaluate its role in Wisconsin's conservation movement, and see whether or not its contribution is worthwhile.

Criticisms of the Congress over the years have been mainly three as follows: 1. The local viewpoint is apt to predominate and management problems are regarded from the local or county level; 2. An uninformed public participates in a field which had better be handled by technical men; 3. The approach to wildlife management by merely recommending a set of regulations is both narrow and negative. If these criticisms can be directed at the Congress in its early years, certainly they apply also to some of the thinking of the time. When the Wisconsin legislature provided easy access to public hearings on proposed fish and game regulations, the supposition prevailed that no group was better qualified to testify on the status of fish and game in any given locality than the folks who lived there--and who hunted and fished there. We know now "it ain't necessarily so."

Local views still find outlet for expression in the Congress. There would be no point in operating a democratic organization unless such were the case. But the state Congress is doing an excellent job of recommending a fish and game code which is uniform, simple and consistent with good management practices. If not consistent with the above principles, local whims and notions are given short shrift. Grass-roots participation in a field as vastly intricate and complicated as wildlife management may be held suspect by many fish and game technicians, who fear domination by the type of individual whom Dr. Ira T. Gabrielson has so aptly characterized as silver-tongued and leather-headed. Wildlife administrators, however, must recognize the conditions which make theirs such a peculiar lot. One is the legal conception of ownership of fish and game. It is owned in common by all citizens, something like air. Second, nearly every able-bodied person at one time or another has engaged in hunting or fishing--and it only takes one excursion into the field to become an expert. These situations are common to all our states and explain why wildlife administration is housed in the most transparent of glass. This talk of an uninformed public is nothing new. It was the major issue in the early days of our republic. Hamilton and the Federalist party reflected the viewpoint of the intelligent class of the time when they interpreted democratic participation in government as equivalent to mob rule.

Thomas Jefferson, who had a profound respect for the good judgment of the common man, said: "Do not be too severe upon the errors of the people, but reclaim them by enlightening them." Jefferson's term, "enlightenment" is what we mean today when we talk about "educating" people for this or for that. A well-informed citizenry is the very cornerstone of a functioning democracy, and if we fail to keep them informed, we, not they, are falling down on the job. The people have a right to be heard, they also have a right to hear. An organization like the Conservation Congress, reaching into every nook and corner of Wisconsin and made up of county conservation leaders, can bridge the gap that exists between the public and the men who are hired to manage its natural resources. Not only that but it can bridge the time lag which exists between public opinion and management necessities. We would lack both vision and imagination if we failed to regard the Congress in that light.

There are some who shrink from the rough and tumble of public debate, whether it takes place at a county hearing or at the state congress. Debate, discussion and argument have a tendency to sift and winnow and evaluate. Although the leather-headed, silver-tongued variety of member is not too common in the Congress---he doesn't last too long nor does he make the impression which is credited to him---all of us who see the error of his ways are indebted to him too. His very eloquence and persuaveness puts us on our toes to counteract his propaganda--also a wholesome reaction. In its formative years, the Congress, again reflecting the thinking of the time, placed considerably more reliance on wildlife regulations pertaining to seasons, size and bag limits, as a way to wildlife abundance.

Today we know that wildlife populations are almost directly related to the quantity and quality of their habitat and that length of seasons, size and bag limits merely constitute a rationing system which attempts to apportion the annual surplus crop equally among those who are eligible to hunt and fish. In these changing conceptions, our study committees have played an important role. It is interesting to note that the committees dealing with wildlife subjects stress habitat management as the number one requisite for more abundant wildlife populations and that good fish and game habitat is merely a by-product of sound management of our basic resources, forests, soil and water. To summarize this appraisal of the Congress: Over the years the Congress has broadened its base of its operations and has widened its horizons. It is definitely established as a progressive force, adding grass-roots impetus to Wisconsin's conservation program. Like any other democratic institution, it is as effective as we want to make it. It is our constant objective to utilize its potential for cooperation and leadership to the fullest.

...The convention adjourned until 1:30 P. M. o'clock of the same day...

TUESDAY AFTERNOON SESSION, JULY 25, 1950
(General Chairman--Vice-president, Dave Leahy)

VICE-PRESIDENT LEAHY: Ladies and gentlemen, the first thing on the program is "Problems of International Waterfowl Management". The panel chairman will be G. W. Malaher of Manitoba. I give you Mr. Malaher. (Applause)

MR. MALAHER: Ladies and gentlemen: The title of this session is Problems of International Waterfowl Management. My interpretation of this title leads me to suggest that our deliberations this afternoon should be directed not toward the results of this season's waterfowl breeding survey nor to what the hunting regulations for this year may be but rather toward the long term management of our joint waterfowl resources and the special management problems which the migratory habits of these birds create.

I feel however, that some of you might be disappointed if I as a Canadian did not say something about waterfowl conditions back home in the breeding grounds. In doing so I want to make my position quite clear.

I am here not as a delegate from the Canadian Wildlife Service representing Canada as a whole, but as a representative of the Canadian Province of Manitoba which is a member in this Association of Midwest Fish and Game Commissioners. My remarks should therefore be confined to the province and the jurisdiction I represent.

I am happy to tell you that with respect to Manitoba the over-all results of our breeding ground surveys to date can be summed up in two words NO CHANGE. That is to say no change from the relatively good position of 1949.

True, there have been some shifts in population but we feel that decreases in certain areas are balanced by increases in others. The spring this year was late. In the southern part of the province, particularly in the Red River Valley--there was an unusual amount of water. In fact--as you may have heard--we had a flood!

There was a definite increase in the number of birds remaining in this area to nest; partly we believe on account of the availability of nesting areas and partly because of late arrival from the south. Birds were anywhere from ten days to three weeks later than usual in reaching southern Manitoba.

The northern part of the province reflected this condition in the south and revealed a lower nesting population particularly in the delta of the Saskatchewan River.

Nesting success is not yet fully determined. The hatch is late and birds will be late on the wing. Later in my remarks I shall tell you something more of our breeding grounds, of the work which has been done in improving them and of the co-operative waterfowl surveys now undertaken. But for the moment I want to get back to the main subject of our discussion--The Problems in International Waterfowl Management.

It is not my intention--nor do I consider it my function as Chairman of this Waterfowl Session--to give you my personal views as to what our problems may be.

The better course might be to pose a few questions, speak on them briefly within the scope of my own knowledge and I hope encourage thought and general discussion as the main part of this session.

Is there any problem because of an international boundary?
Are we co-ordinating our efforts as well as might be?
Are present management practices and techniques basically sound?
Are we moving forward in waterfowl management or do we still rely too much on legislation?
Where do our most serious problems lie?
Do they lie in too-intensive hunting pressure and over-harvesting of birds?
Are they to be found on the breeding grounds or on the wintering grounds?
Is habitat destruction on one or both of these areas our major problem?

These I think are the type of questions we should be asking ourselves and attempting to answer in open discussion.

In the management of any resource common to and migratory between various jurisdictions there are bound to be problems which would not occur in any single jurisdiction. It was undoubtedly in recognition of this fact that our two countries, at a Convention in August 1916, agreed to work together for the protection of migratory birds. This Convention--ratified by the Parliaments of both countries--was the first major step in waterfowl management.

We have gone a long way since that first step. In recent years our strides have been greater. Management--intelligent management--of any business is dependent on periodic inventories to determine the amount and condition of the stock on hand. In this field the management of waterfowl on a continental basis has made great progress in recent years.

Until very recently--in Canada at least--the waterfowl survey--if such it could be called--was on a personal appraisal basis and no better or more reliable than the memory of individuals who contributed to it.

Today in Manitoba, and in the other major duck producing provinces, we have three governmental agencies working on a cooperative basis gathering factual waterfowl information on the breeding grounds on a comparative basis. Information is pooled for the benefit of all. These agencies are the United States Fish and Wildlife Service, the Canadian Wildlife Service and the Game and Fisheries Branch of our own Department.

For survey purposes Manitoba is divided into a number of districts. The boundaries of these districts are largely determined by soil classification as it has been found that utilization by waterfowl varies considerably even with minor changes in soil type where no change in environmental conditions is apparent.

In each district permanent transects have been established on a scale calculated to give an adequate sampling of the waterfowl population.

This system of transects was first used in Manitoba and indeed in Canada by your own Fish and Wildlife Service after a number of years in reconnaissance work on the breeding grounds.

In 1948 the Manitoba Game Branch extended this system of transects, complementing the work already in progress.

A dozen conservation officers were assigned the job of counting waterfowl. These men were instructed in observing and recording in accordance with the standard inventory procedures then in practice.

A primary objective was to determine whether inventory methods would give similar answers to both trained biologists and keen conservation officers or game wardens.

We have established that Game Branch personnel--operating independtly--can obtain remarkably similar counts provided that they are properly instructed, know their birds and work conscientiously.

The following comparisons between biologist and conservation officer data illustrate the similarity of results obtained. The figures are from four inventory districts in 1949.

Ducks per square mile

	Biologists		Conservation Officers
	54.0		53.5
	33.4		38.6
	34.2		35.5
	81.4		74.0
Average	50.8	Average	50.4

I have one thing more I want to say in regard to these breeding ground surveys. I have been very closely associated with the work done in Manitoba by the Flyway biologists of the United States Fish and Wildlife Service since 1942. I have been most favourably impressed with their sincerity of purpose, objectivity of approach, desire to continually improve methods and techniques, and collective capacity for hard work. I feel that I can speak for other Canadians when I say this: and I say too that you could have no better ambassadors of goodwill, personally or professionally.

If there is any lack of co-ordinated effort in these breeding ground surveys, the fault is ours in Canada.

I as a Canadian and as an administrator charged with a small part to play in waterfowl management, must admit to serious lack of knowledge in your wintering ground surveys, the fault is ours in Canada.

I as a Canadian and as an administrator charged with a small part to play in waterfowl management, must admit to serious lack of knowledge in your wintering ground problems. It is in conferences and discussions such as this that I hope to better that knowledge. I have a closer knowledge of part of the breeding grounds.

In Manitoba today we have some 2,000,000 acres of marsh area under management for waterfowl and muskrat production. The largest area lies in the flood plains and delta area of the Saskatchewan River. Water control has played a major part in the development of some of these areas. In some cases the construction of dams has been undertaken by Ducks Unlimited and the structures then turned over to provincial administration for operation and maintenance.

In others, development has been undertaken as a joint Dominion-Provincial project directed primarily at rehabilitation of the muskrat resource but of direct benefit to waterfowl also.

The majority of these marsh areas are still public domain and under present policy they are not for sale.

Across the prairie part of the province there has unavoidably been a considerable amount of drainage in the settlement of agricultural land, but in much of the valuable Minnedosa Pothole country the land does not lend itself to further drainage and given adequate rainfall it should remain a most valuable duck breeding area.

We must not lose sight of the fact that no mean proportion of our ducks are raised in the prairie farming area and that ownership of land in this case is almost entirely in private hands. We must have the sympathy, understanding and cooperation of the landowners if we are to maintain or improve duck production.

Most of the breeding ground survey is conducted south of latitude 54°.

Roughly 140,000 square miles lie to the north--full of lakes. We now have men stationed in this remote area and the survey is extending. We need better knowledge of waterfowl potential in this vast area.

With regard to hunting pressure we cannot get away from the fact that pressure has increased three-fold in recent years. Better means of transportation, coupled with improvement and extension of roads, have made hunting areas more accessible. This is causing concern particularly for marshes close to urban centers. The concern of Manitoba hunters has been experience in voluntary restriction of hunting privilege. Several years ago they expressed their willingness to forego a duck season entirely if such were found necessary. Those who hunt the Delta marshes asked for special restriction to halt the "burning out" process, and accepted a materially shorter season in this Waterfowl Control Area. This year in order to safeguard hand-raised geese released to re-establish a nesting population of these birds in the marsh, they asked for a total prohibition on the shooting of geese in the area. I feel our Manitoba sportsmen have shown real appreciation of our problems.

Without support of our hunting public we can only go so far in legislation. In the international waterfowl problems I feel the same holds true. A better understanding of hunting practice, and of the reasons underlying regional or national differences in hunting regulations is I think fundamental to successful waterfowl management.

I don't want to take up the time of this meeting in talking further to you now. There are a number of other speakers on this panel who will deal with other aspects of the international problems encountered in waterfowl management. The next speaker on this panel is another Canadian. I hope you don't get tired of us today. Dr. Clarke is the Assistant Chief of the Division of Fish and Wildlife for the Province of Ontario and titled his paper "Problems of International Waterfowl Management in Ontario." Dr. Clarke. (Applause)

DR. CLARKE: There is a basic contradiction in my prefatory remarks about Ontario. Ontario is not an important waterfowl area in the sense that Manitoba is. Our lake-studded northern shield is duck poor and always has been. We established by rather casual methods, but still to our own satisfaction, that not more than 10% of our shooters deliberately go waterfowl shooting and of these only a few are confirmed duck shooters.

In direct contradiction, it must be said that the province contains the great coastal marshes of James Bay, and around the Great Lakes there are shooting grounds renowned since early days. Most of them are now in private hands and some in U. S. hands.

Our oldest population centers were near good marshes. The waterfront industrial area of Townte was once a famous duck shooting ground. In consequence there was an early interest in waterfowl. Spring shooting laws date from 1860 and when, because of the Treaty, the protection of waterfowl became a federal responsibility, few basic changes had to be made in protective regulations in Ontario.

Though we have a low production the area--we have 400 thousand square miles--makes it significant. Over three-fourths of it is northern forest dotted with lakes and ponds of which only a portion have ever been counted or mapped. Aerial checks like those made for years in the west show a possibility of only a brood or two to the square mile. Over half is black duck country; the rest is mallard country, west of the black duck range. The northern coastal plain is goose country and I entreat you all to read the recent bulletin of the Illinois Natural History Sruvey in which each winter concentration of honkers is traced to separate breeding zones.

The whole land is under trap-line management, and we can say with reasonable accuracy that there are about 100 thousand beaver ponds, a high proportion of which carry a brood of ducks. The James Bay marshes are highly productive and there are nesting ducks scattered over the southern agricultural area. No matter how you look at it, the production goes up past the six-figure level.

In migration, the Great Lakes area gets a great flight of western ducks in addition to local and northern birds. In these flights, our shooters are conscious of the same shortages that affect the rest of the continent. We are also aware that the northern bred birds are not and never have been constant in numbers from year to year even though major changes have not taken place on the breeding grounds. We cannot and should not expect any wildlife population to be constant. Over and above these changes, it is obvious to anyone following our duck population trends that what happens to the birds when they are outside our limits is very important.

When it comes to problems of international importance, it is hard to offer much from Ontario. I suppose there is really only one problem--more birds. When it comes to breeding grounds, let us never forget that it will always take ducks to beget ducks. The mere presence of water won't do it. Shakespeare said that the mud of the Nile bred crocodiles through the action of the sun, but he will never be known as a sound biologist, though one could argue the indirect truth of his statement. The contribution we could make by marsh restoration in Ontario would be trifling, though the principle of making every bit count might apply. We look with envy at the tens of thousands of barren ponds in the north. Could we fertilize them, or otherwise bring them into production? In one lake, work of this type, namely, introduction of food plants was successful but it was one of the most fertile in the north anyway and not a good sample. It may be that these lakes are forever barred to high duck production because of a black-fly borne parasite that kills the young. The eastern distribution of the black duck, really only a mutant of the mallard, may be explained by a high tolerance to this disease, the parasite of which has had for some time a high research priority in Ontario. What we can do in beaver management would be done anyway, without a thought for ducks. We have in Toronto Bay one of the few artificially established breeding duck populations on this continent. We look with interest at the marshes around the Great Lakes and note that though apparently suited for diving ducks, they have never had a breeding diving duck population.

We also need a more intelligent outlook by sportsmen so that they can look beyond their immediate interest in what they are likely to get this season and to some of these problems I have hinted at. A great many of our gunners are confirmed believers in dangerous half truth, that ducks are raised in Canada and shot in U.S.A. Things haven't changed in Ontario so why in hell should we do anything. Cooperative duck investigations by our eastern provinces started just this year, a reflection of this attitude, and some even mistrust the motives of the U. S., advocates of cooperative action, who,

so they think, want to make conservation in Canada an excuse for more shooting at home. Every once in a while we get something like the little booklet referred to several times here that seems to confirm this opinion. Of course, this does not apply to the Fish and Wildlife Service whose job is so obviously concerned with ducks that everyone can understand it. We were pleased to have their Mississippi flyway team with us for a short time this year and sorry that we were able to give them so little direct help.

As I said, this year, we, along with other provinces east of the so-called duck factory were busying ourselves about ducks to an extent greater than ever before, and I hope that our contribution to the edifice of knowledge will be judged not by the volume of bricks, but by the strategic spots in which they are placed.

MR. MALAHER: Thank you, Dr. Clarke. I think, gentlemen, that perhaps Dr. Clarke's remarks, to some extent, along with my own, may bring out the vastness of this Canadian northland about which we actually know so little even today. It is only in the very recent years that we have begun to appreciate the wealth of the natural resources in that country, or to obtain any understanding at all of the duck potential in the whole of that north country. As Dr. Clarke told you, there are thousands of lakes, not only in northern Manitoba, but in northern Ontario, and in northern Canada generally, which are not even mapped, and about which nothing is known. I am now going to ask my friend Bud Morgan, Commissioner for the State of North Dakota, to give us his view of the international problems on waterfowl management.

MR. H. R. MORGAN: Thank you, Mr. Chairman. Ladies and gentlemen: Dr. Clarke, who just spoke to you, made the observation that water did not necessarily mean ducks. I agree with him 100 per cent. Nevertheless, while we are talking about that, I think we must also bear in mind the fact that water is very necessary in duck production, and as a consequence, a greater part of my remarks will be given over to trying to describe to you some of the things we in North Dakota are presently trying to do about developing the water that we have for duck production and management.

What we are doing to help in a practical way--

A pot hole study to determine:

1. No. of water areas.
2. Their distribution.
3. Their classification based upon longevity.
4. Their estimated acres.

This determination was arrived at by annually taking a 5% aerial sample by using 17-half mile wide strips, extending across the state from east to west.

A portable wire recorder used is to record data classified as A.

5,000 acres of	A. Permanent water.
20,000 acres of	B. Normal water
200,000 acres of	C. Normally dry in late summer.
750,000 acres of	D. Transient pot holes.
20,000 acres of	E. Man made.
1,000,000	

No classification other than this has been carried on--other classifications relative to waters important to duck productions will, we hope, in the future go forward.

Many of our water areas in North Dakota are depressions resulting from the glacial period. Nature is constantly at work to destroy these.

In '48, approximately 555,000 of these pot holes carried water. The "D" type or transient pot hole was responsible in large measure for the annual fluctuation.

Total acreage surface was approximately 1,900,000 acres.

One hundred forty-nine showed approximately 490,000 areas with an acreage of 1,600,000. In spite of this decrease, duck populations were up in '49 over '48.

Combining several Class "D" pot holes into one benefits land use and may benefit wildlife by virtue of their being transient.

We have already started working closely with P.M.A. and S.C.S. in the management of such pot holes. In some areas of the state this spring as high as 164 of this class of pot holes were observed on one sec. or one pot hole on an average of less than two acres.

Because our land values are not high, the cost of drainage is a limiting factor that must be and is recognized. The rolling nature of our glacial terraine is another controlling factor, making drainage expensive in our heavily pot holed country.

P.M.A. records up to the end of '49 show that they have subsidized in my state the drainage of approximately 300 water areas. The effect upon wildlife of which is questionable. During the same period, they have subsidized creation of over 10,000 new water areas in that part of the state where water was scarce. In other words, for every water area moved or combined with other pot holes, thirty new areas were created in areas where water was needed. This may in part be due to better duck shooting in the dry S.W. one-fourth of the state in recent years.

Along with this inventory work on water, which is necessary for waterfowl has gone inventory work on ducks.

Beginning in the summer of '48 methods of determining duck production in the state were put into practice. Most of the censusing work is done by plane, where again 17 strips equally spaced are flown across the length of the state. This work is started each spring in an attempt to determine spring migration. It is done again in the last part of July and early August to determine relation between the spring population and broods observed. Ground transects are also made during July to check against aerial counts, checking the number and size of broods. How definite the results of this inventory work is, remains questionable as conditions under which it is done vary the results. However, we are convinced that they do act as an index to population fluctuations and the results are a definite asset to waterfowl management.

Spraying by air is new in North Dakota. Aerial spraying of both herbisides and insecticides started on a small scale last year. Because it is comparatively cheap to do and because of the terrific advertising campaign carried on to encourage it, the chances are that 3,000,000 acres may be subjected to this treatment this summer in my state.

Little is apparently known of its effects upon man, the soil or wildlife. As a consequence, we became worried and are at this time carrying on a small project in an attempt to determine its results praticularly on waterfowl. Much of our duck factory is located on land surrounded by grain fields. When spraying by air the operator does not bother to turn off his spray upon approaching one of these pot holes. The result being that the pot hole is subjected to the same dose that the surrounding grain is subjected to. We picked several marsh areas with uniform emergent irrigation and sprayed alternate strips using recommended dosages. Although no report has been written on the results, I was informed by the man in charge, just prior to leaving my office, that the detrimental results are very evident both in loss of cover and mortality of waterfowl.

We in North Dakota are conscious of the fact that we are important in waterfowl production. As a result we are doing something about water management which is important to waterfowl. This is being accomplished by keeping a check upon fluctuation of numbers of duck breeding areas. It is further being done by cooperating with the two agencies who are chiefly responsible for water manipulation, namely P.M.A. and S.C.S. We are going all out in an effort to cooperate with the Fish and Wildlife Service to the end that more exact figures as to shootable populations are available from year to year. We are endeavoring to put first things first and as a consequence, are compiling figures on the results of chemicals as they affect waterfowl, believing that they may be a greater menace than is drainage in the near future. We are convinced that migratory waterfowl must be managed upon a continental basis and that more important than the gun, is production for the gun. In this, we must all be interested and to this end, we must all work.

MR. MALAHER: Thank you, Mr. Morgan.

The final speaker on our panel is a gentleman who needs to introduction to any of you. I know that you are going to be particularly interested in his remarks on these International problems. I give you Mr. Al Day, Director of the U. S. Fish and Wildlife Service who will read a paper entitled "Waterfowl Management". (Applause)

MR. ALBERT M. DAY: Thank you, Mr. Chairman: Ladies and gentlemen, and members of the press: No more appropriate time could be found, I suppose, to discuss waterfowl problems and hunting regulations. This is the season of "waterfowl talk" and "duck reports" from many people--hunters and biologists alike--who are in the waterfowl producing areas of the continent. The corps of trained biologists who have been working throughout Canada, Alaska, and the nesting areas in the United States is just now completing final reports--sending them to Washington for analysis and study.

It is on the basis of these reports from the breeding grounds that the hunting regulations for the United States will be decided within the next two weeks. This year we hope to have the regulations signed by August 26 and promulgated immediately thereafter. This will give about five weeks to publicise them before the first duck hunting season opens in the United States on October 6.

Because of the unusually late spring and resultant late hatch in most sections of the United States and Canada this year and in order that we might have the most complete information obtainable as to the final results on the nesting grounds, we recently found a way to stretch the time limit under the Administrative Procedures Act so that the final regulations will now be drafted and announced about one month later than in former seasons.

This is an experimental proposition so far, but, if it works well, we propose to continue it in future years as it will have the effect of reducing the chances for error that occasionally arise because of late developments on the nesting grounds.

The chief difficulty of this new procedure, as we see it, will be the delay in the publication of the regulations. Some states in the past have objected rather seriously to a late announcement of the regulations because of the problem of incorporating the waterfowl regulations with their other printed regulatory material.

But regardless of what the regulations will be, I can assure you of one thing. There will be the usual clamor and howl from certain quarters the the Fish and Wildlife Service has used exceedingly poor judgment, has been a party to rank discrimination, has refused to cooperate with the states and the duck hunting fraternity at large and that the regulations are issued on the basis of prejudice and personal desires on the part of a few chair-warming bureaucrats. There will be others who will maintain that we have been too liberal and easy-going.

The situation this year, insofar as public opinion is concerned, is a bit difficult. The winter inventory a year ago indicated an upswing in wintering populations and, although there was considerable drought in the prairie provinces of Canada during the 1949 breeding season, the birds moved on to the watered areas to the north early enough so that we assumed that there would be a reasonable crop. It was a necessary expedient on our part, since the regulations had to be formulated without waiting for later reports.

During the subsequent months it was found that our assumption was wrong. For a variety of reasons, the number of young was not as great as we had anticipated. Generally speaking, the ratio of young to adult birds, in thousands of bag checks that were made throughout the country last year, was only about half of what it had been the two previous seasons--a significant index of last year's production, and proof of a decline.

The kill was heavier during the fall of 1949 than it was in 1948. The January 1950 inventory showed a decline of material proportions in wintering birds in both the Mississippi and Pacific Flyways. In the Pacific, much of the loss indicated by the survey was due to a perceptible drop in birds on the vast wintering grounds of Mexico.

When we announced the results of the January inventory, the reaction from some quarters was quite severe. Some groups challenged the winter inventory, although it has been the basis for our estimate of trends in populations for almost 15 years and so far it has never been proved wrong.

Ducks Unlimited, notoriously and consistently optimistic in their early season publicity, issued a caustic statement without checking with us in advance to learn the answers to the questions which they raised publicly. This has served to confuse the situation and has given encouragement to those hunters who would like to put enough pressure on the Service to force relaxation of the regulations regardless of the conditions as we find them. So I look forward to no great amount of pleasure during the next 30 days, although we have the very real satisfaction of knowing that whatever regulations we issue will be based upon the best information that is available to us with the existing manpower and methods at our disposal. Furthermore, it can be said without fear of successful contradiction that there has been no time in the past when so much factual data were available.

I wish it were possible some day to convince the public that this matter of annual regulations is of secondary importance. I know it is difficult because the average fellow who buys a license and a box of shells and takes a day or so off to go duck hunting naturally wants to come home with the limit each day. If he is a member of an expensive club or owns a private marsh and has considerable money invested, the more important is the number of ducks that he can secure during the season, and the longer the season and the larger the bag limit, the more returns he gets out of his investment.

Yet the regulations are merely temporary devices to adjust the supply to the anticipated demand each year. This can be readily proven by a mere scanning of the records. Seasons have varied from 80 to 70 to 60 to 30 days and then back to 45 and 50 days within the past decade. They will continue to vary as conditions vary and production and demand for harvest fluctuates from year to year.

I wish it were possible for us to drive home to the average hunter the fact that in waterfowl management a 30 or 40 or 50-day season for any one state is only a part of the picture. If we could get him to think in terms of an individual duck, he would realize that the length of season in any one state is only part of the story.

Ducks and geese must dodge shotgun pellets and avoid blinds from September 1 in northern Alaska and northern Canada until they reach our own northern states when the season opens early in October. From that time until they move southward they are bombarded until the season ends in the South in the early part of January. If they go into Mexico or Central America the hazards are still with them, even to the time when they begin to pair off and start winging their way back to the northern breeding grounds again. And these winter kills are not confined to Mexico alone. There is a heavy toll by illegal gunners on all of the major wintering grounds in this country. If this drain could be stopped, it would go a long way in providing the longer seasons and larger bag limits that we all want.

The annual regulations are based upon progressively more accurate information each year. Coverage by trained biologists has been expanded materially, and cooperation with the states and with the Canadian dominion and provincial authorities has never been better. The Fish and Wildlife Service staff in Alaska has been materially increased in the past two years. Many more thousands of birds are being banded now than a few years ago. Practically every state in the nesting range and many in the wintering areas have active and vital waterfowl projects, usually through Pittman-Robertson aid.

State departments are banding together in Flyway Committees to correlate their information and the Fish and Wildlife Service is supplying regional coordinators as rapidly as the need develops and funds become available, in order that all of the information may be translated into management practices. More airplanes, boats, and automobiles are at the disposal of the technicians now than were available a few years ago. A vast amount of data from all of these public sources, as well as such information as can be supplied by Ducks Unlimited, goes into the grist mill each year.

Yet the best regulations that can possibly be made are still of minor importance when we contemplate the over-all needs of waterfowl management. Waterfowl habitat has progressively disappeared as our modern civilization has placed more and more demands on our lands and our waters, and there is no slackening in the pace of this destruction.

The states, with Pittman-Robertson funds, have accelerated waterfowl marsh restoration more than ever before in the history of the conservation movement. The Fish and Wildlife Service is spending every nickel it can get to acquire, restore, and develop areas for the birds. Yet on all sides the demands for more intensive uses of lands and waters are complicating the over-all picture to the point where it sometimes looks as though we are losing ground more rapidly than we are gaining it.

There is hardly a river in this entire country that has not been studied and surveyed for some sort of improvement in the interest of power, navigation, or flood control. Fortunately, through the medium of the Coordination Act (Public Law 732) the Fish and Wildlife Service and the fish and game departments of the states now have a chance to work with the construction agencies to see that the impoundments do the least possible damage to fish and wildlife interests, and, wherever possible, increase those values. Some excellent projects for the benefit of waterfowl will result from these cooperative endeavors.

The vexing problem is the protection of existing wildlife habitat on privately owned lands. The great bulk of the waterfowl in normal years is produced in the marshes and ponds and pot holes on the thousands of farms and ranches scattered throughout the breeding range. The permanent waters on State and Federal refuges and the larger lakes are exceedingly important in drouth years, as they are toward the end of normal seasons when smaller areas dry up and the birds move their flocks to the pools prepared for them. Many of them are exceedingly important nesting areas. But the privately owned lands always have, and I hope always will, provide the bulk of the ducks and geese that make up the fall flights.

The drainage of privately-owned marsh lands has been greatly encouraged and accelerated in recent years by the payment of subsidies for soil conservation and soil improvement practices under the provisions of the Production and Marketing Administration of the Department of Agriculture. The Soil Conservation Service serves as a technical agency in advising farmers and P.M.A. on various practices, including agricultural drainage.

The drainage of some wet lands is beneficial to waterfowl, such as the small shallow areas that normally dry up in midsummer and become death traps for fledgling birds. As to whether it's good for the farmer in adding to underground water supply needs to be seen. Yet there are literary thousands of other sloughs, ponds, and pot holes throughout the vast expanse of the Prairie States, each of which produces or helps produce from a scattered few to many broods each year. Many of these are bound to disappear permanently in this program unless some means can be found to keep them as they are now.

The problem is not by any means confined to the breeding range. It is important as well in the highly important wintering grounds of the Gulf Coast. Here also payments are made to farmers and ranchers to convert wet lands into pastures. We have recently gone to considerable lengths to avoid having drainage ditches dug just outside the boundary line of one of our most important wintering refuges on the Gulf Coast. If constructed, this ditch would improve the pasture situation for four cattle men, but would also lead, in our opinion, to the destruction of thirty or forty thousand acres of excellent waterfowl marsh, purchased and improved at a cost of many thousands of dollars of wildlife funds.

When we raise these questions of lack of correlation and outright conflict between agricultural programs and wildlife conservation needs, no one should feel that we are being critical of the personnel of sister agencies in Government. Any Government as complicated and complex as ours is bound to lead to clashes of interest between the different groups that make up our population.

The Congress passes laws for the benefit of these various groups and interests and the executive departments and bureaus carry out the Congressional mandates. The men in Production and Marketing Administration are approving payments for soil conservation practices, whether it be for the construction of farm ponds on the one hand, or the drainage of existing marshes on the other, in accordance with those laws. The Soil Conservation Service, acting as a technical agency, gives them advice. The Soil Conservation Service has some very fine wildlife technicians. Although, in my opinion, they are all too few, they do important work wherever they are.

I think that perhaps much of the fault can be charged to we folks in the wildlife field, both State and Federal, and the duck hunters as well. I doubt that we have been doing as much as we should to see that wildlife interests are protected in this matter of agricultural drainage.

In discussing the problem with administrators of the Production and Marketing Administration in Washington we have been urged by them to ask for better representation at the County and State levels of the P.M.A. organization. That is a job which people connected with the State fish and game departments and the Fish and Wildlife Service can do better than can agents interested in purely agricultural pursuits.

Only a few years ago we were standing back criticizing the Corps of Engineers and the Reclamation Service for paying so little attention to fish and wildlife values in the construction of water impoundments on our river systems. I, myself, admit to making some rather caustic speeches over the country about how little heed was paid to the outdoor interests while the engineers were making over the face of nature.

Finally we set up a small staff in the Fish and Wildlife Service to work with the engineers instead of belaboring them from afar. A short time later the Coordination Act was revised and strengthened. Now we have a staff of trained fishery and wildlife biologists and engineers in each of our regional offices working with the personnel of the construction agencies.

In the Missouri River Basin, we maintain headquarters at Billings, Montana--working in close cooperation with both the Reclamation Service and the Army Engineers. At the present time, the Congress provides approximately one million dollars a year for the Fish and Wildlife Service to carry on these studies. Working in close cooperation with the state fish and game departments, we now provide an analysis of the probable effects on fish and wildlife for each project authorization that goes to the Congress for consideration.

I think we should take the same approach in so far as agricultural drainage is concerned. We are making a small beginning by having our Missouri River Basin staff initiate studies to determine the value of pot holes from the standpoint of waterfowl production. We hope to classify the different types of pot holes on the basis of use by waterfowl and to obtain information on the relation of pot holes to each other in respect to wildlife values. Much more of this sort of thing needs to be done as a guide to an intelligent approach to the question.

But over and beyond that, I feel we must in some manner find a means of working closer with the agricultural agencies. With this in mind, I have authorized the use of duck stamp funds, beginning at once, to add to our River Basin staff in Washington a liaison officer to work with the Department of Agriculture to see if we can find a more acceptable approach to this agricultural drainage-wildlife conflict. We have selected one of the outstanding waterfowl biologists of our entire staff to head up the work. He will soon be contacting the state fish and game departments and the state offices of the Production and Marketing Administration, the Soil Conservation Service, and other Agricultural units involved in carrying out the agricultural program.

We are also initiating, to the extent that we can with existing funds, a nation-wide marsh survey. As a result of this small beginning, I am hoping that we can later go on to the Congress with a plan which will provide sufficient manpower to work with the agricultural officials at state and county levels.

Out of all this, I hope that we can find some means of preserving the areas that are of primary benefit to waterfowl. Instead of paying farmers for draining valuable marshes, it might be possible to find some means of inducing them to keep them in their natural state. Certainly, we who are interested in waterfowl should take a more active part in seeing that areas that are of primary importance to wildlife are given a more complete measure of protection.

The President has already recognized the conflict of interests and the lack of correlation between Federal agencies insofar as water uses are concerned. He recently established the President's Water Resources Policy Commission, headed by outstanding individuals who are going into this whole question of water use. Conservation interests have been requested to submit their recommendations. The Fish and Wildlife Service has completed a quite extensive report, and the advice of state fish and game departments and various conservation agencies has also been requested. I hope that all will respond to the invitation. This Board can be most useful in an advisory capacity at the highest level of Government.

The Hoover Commission on the Reorganization of the Executive Branch of the Government also made recommendations along the same line, and legislation was introduced recently looking toward this end. The bill is H. R. 8663 introduced by Congressman Cecil F. White of California on May 29, 1950. Among other things, this bill would provide for a board of five members appointed by the President which would "under the direction and supervision of the President, make investigations, analyze, and report with recommendations on all major civil public works (except projects of the Atomic Energy Commission) constructed by the Federal Government or in whole or in part with the use of Federal funds, including among other purposes flood control, river and harbor improvement, navigation, irrigation, drainage, hydro-electric power, municipal and industrial water supplies, fish and wildlife conservation, and related land improvement and conservation."

The teeth in the proposal lie in one section which states "no plan or report relating to the construction of projects...shall be submitted to the Congress for consideration unless first approved by the Board." The bill also states that "the various departments, agencies, and establishments of the Government are directed to cooperate with the Board in the performance of its duties under this section." So there are encouraging signs on the horizon.

The duck stamp funds, which amounted to about four million dollars last year, due to the increase to $2.00, will give a decided impetus to the program of refuge rehabilitation, so badly needed to correct the deterioration of many of our areas during the war. Some of these funds will be used for improving the observational program and for study of diseases of waterfowl, particularly botulism. The enforcement program will be increased to the limit of the funds allowed for this purpose. Within the past year we have attempted to have the amount that we could spend for enforcement increased, but because of unexpected opposition from a few of the western state commissioners this has been blocked temporarily.

Additional purchases of waterfowl management areas and refuges will be made as rapidly as funds permit. Important phases of research and disease control work will be stepped up. Cooperation and unity within our various wildlife agencies will continue--and will undoubtedly increase.

We of the conservation fraternity may feel justifiably proud of the fact that we still have waterfowl and still enjoy good hunting. Many wildlife species have been slaughtered to the point of actual or virtual extinction. Only good management--through the foresight and unstinting efforts of wildlife conservationists--has preserved for us our great resources of ducks and geese.

We are continuing to make progress in the scientific management of waterfowl, but the forces of destruction--principally loss of habitat and illegal hunting--are always before. Constant, continuing effort on the part of all hands is necessary to keep our waterfowl management program afloat.

MR. MALAHER: Thank you, Mr. Day, for a very interesting and instructive paper. I am now going to turn the meeting back to Mr. Leahy, who has an announcement to make before we proceed.

...Vice-President Leahy made several announcements...

VICE-PRESIDENT LEAHY: Now, gentlemen, we will proceed with the program. The discussion leader is Mr. Melvin O. Steen, Chief of the Fish and Game Division of Missouri. Mr. Steen.

MR. MELVIN O. STEEN: Thank you, Dave. Ladies and gentlemen of the conference. I think that the job of discussion leader is probably one of the toughest assignments that can be handed any individual. I think he has two responsibilities: (1) To review the presentations that have been made, and to analyze them. (2) To hold a discussion that may add to the sound, constructive worthwhile topics previously given. We shall attempt to do that this afternoon. We shall say more about that later.

For the moment I want to compliment Mr. Malaher and the others who have appeared on this program, because of the constructive approach they have taken to the question of international problems of waterfowl management.

I have personally attended a great many waterfowl conferences and meetings. Now, I do not want to appear unduly critical, but practically all of them have degenerated into free for all arguments as to how I, or we, or us can get a chance to kill more ducks, rather than to adhere to a constructive analysis of the basic problems of waterfowl management. I want to say here and now, I should attempt to hold this discussion this afternoon to the basic things.

In all phases of management, we have two major problems. One, of course, is the control of the harvest, the control of the utilization of a resource. I think it is quite safe to say that in this day and age, we are doing a pretty good job, in management circles, of controlling the harvest of wildlife to

desirable limits. As a matter of fact, I personally feel that we devote too much time and effort to the discussion of that problem, and not enough to the basic problem of management, which is that of production.

My reason for complimenting the gentlemen who have appeared here this afternoon is that they have discussed, primarily, the production problems. In the management of waterfowl, we deal with a species that is migratory. It goes through its reproductive efforts in the northern regions of the continental range, travels through migratory routes, and winters in the southern regions of this continent.

We hear a great deal in the states about the ducks the Canadians kill, and all the ducks the Mexicans kill, how much longer the Canadian's season is than ours, how much more liberal, and all that sort of thing. However, the figures are something like this, and Mr. Day or others can correct me if I am wrong: I believe that the gunners of the United States killed about 80 per cent of all the ducks that are taken on the North American continent. Consequently, if we have any problems with respect to the control of the kill, they are in our lap here in the United States, are not in the provinces of Canada, nor in Mexico to the south.

I am going to drop, for the moment, the problems of controlling the kill to safe limits, and discuss much more important, a much more fundamental problem in waterfowl management---the problem of production. A discussion, if you please, of the things that are important on the breeding grounds of North American waterfowl. I would like to begin that discussion by calling your attention to certain pertinent facts. These facts may correct some misunderstandings with respect to what we can or cannot do about improving waterfowl production, or about saving the production we already have. I would like to deviate here long enough to suggest that, if in my discussion I appear to be treading on some toes, think nothing of it. Anything I have to offer, or have to say, is intended sincerely and honestly to be constructive. If we are going to get to the heartof this problem, I think we must discuss it honestly, openly and frankly.

There is a wide-spread impression, I think, in management circles and in the mind of the public, to the effect that if we can build enough reserves and own enough land publicly we can solve a major part of the waterfowl production problem. I would like to bring home to you this truth: That, in the management of all ground nesting birds, including waterfowl, it is economically and otherwise impossible to own enough public land to produce the present crops of ground nesting game birds that exist on this continent.

I am not so familiar with Canadian problems and potentialities as I am with those in the United States, especially in the state in which I was born and raised, North Dakota. I am going to use that as an example to illustrate graphically what I mean when I say that we cannot solve our problems of waterfowl production by relying on public ownership. Incidently, Al Day used to be my old boss. I worked with him, and had a good deal to do with the development of waterfowl management areas in the northwest, and particularly in North Dakota. Therefore, I was very much interested in development there, and their potentialities, and I have followed the situation quite closely there since. Now, in the state of North Dakota there are five major federally-owned refuges, plus some sixty-five smaller reserves, very few of which are owned but all of which are developed and controlled for waterfowl purposes by the federal government. The compromise by far, the most substantial acreage of publicly owned or managed waterfowl refuges that exist in any state which lies in the breeding range of waterfowl in the United States. Now, waterfowl investigations which have been conducted recently by Bud Morgan of North Dakota, and his technicians, bear out the thing that Al Day said earlier today, namely, that

the waterfowl of the North American Continent, are hatched and reared on privately-owned lands. These investigations show that less than two per cent of all the ducks produced in the state of North Dakota are produced on these federally-owned and managed waterfowl areas. In other words, more than 98 per cent are still produced on privately-owned and managed land, and probably never see a refuge or publicly-owned area in their entire existence.

I want to detour for a moment, and submit one other thought, too, that I would like to have you consider and take home with you. I want to direct your attention to the fact that we are putting entirely too much emphasis upon the problems of harvest control, and not nearly enough attention or effort upon the problems of producing the game we harvest. I want to remind you that, for 75 years in these United States we have attempted to produce game by legislation; but I would like to point out to you that we have never produced one buck deer, nor one one cock pheasant, nor one mallard duck by legislative action. All we have ever done is to limit our harvest, control our take. I think it is about time we began to focus more attention and more effort on the other important phase of management, and that is what I hope to do this afternoon with respect to waterfowl. Coming back to North Dakota, we find that less than two per cent of her waterfowl are produced on publicly-owned or managed lands. Now, I don't know positively what the continental picture is on that score. I do know, however, that some years back, when I was personally concerned with the matter, I did considerable checking and arrived at the conclusion that all of the efforts of our government, the Canadian government, Ducks Unlimited, and all other agencies concerned with the restoration of waterfowl breeding grounds touched a good deal less than two per cent of the total breeding area of the North American Continent. It may be slightly more now, but certainly not enough to warrant optimism as to what we are doing in the way of restoring production on the breeding range. Now, please don't misunderstand me. I do not attempt nor intend to belittle efforts along those lines. I just want to call to your attention the cold facts of the case. I want to direct your attention to basic problems, because, unless we attack those problems, we are not going to get the job done. The sum and substance of what I said is this: That if we hope to improve, or even to maintain present production of waterfowl on this continent, we are going to have to devote more time, attention, effort and money to privately-owned lands.

Let me refer back again to North Dakota. I mentioned the fact that there were five major national refuges and some sixty-five other federal areas. In that state, however, there are more than 300,000 pot holes and marshes that ducks can use, some 335,000 of which produce waterfowl. They are all on private land, every last one of them. That is where our major potentialities lie, and there is where we are going to have to work, if we are going to do the job of restoring or even maintaining the production of waterfowl.

I believe Dr. Clarke mentioned earlier the fact that there is water, lots of water, but that all water is not necessarily duck water. That truth is well-known to anyone who has worked on the breeding grounds of waterfowl. The most productive waterfowl areas are the shallow ponds, marshes and sloughs of the fertile prairie regions, that vast area we describe as the Great Plains, particularly that portion which lies in the northern part of the United States and in Canada. There are other sections that produce waterfowl, certainly, but beyond any question the major production and major potentialities for ducks lie in the fertile prairie region.

I am of the opinion that, in this range, and in any other range where we have waterfowl production potentialities, we must go much further than we have gone to date. We must attempt to save and restore waterfowl producing areas on private lands, and certainly to discourage their destruction.

We have heard a good deal today about drainage, particularily about the activity of the Army Engineers, the Soil Conservation Service and Production Marketing Administration, and the impact of their programs upon waterfowl habitat. I am not personally in a position to critically analyze those programs, nor to say that this or that portion of a particular program is good or bad. There are some things about it, however, that I do not understand. I am unable to understand why my government takes my tax money--and they take it either directly or indirectly--and go into the upper reaches of the Missouri River watershed to drain into that river the water held by natural reservoirs for the purpose of reclaiming lands that have doubtful agricultural value, and then shift down into the state of Missouri and use more tax money. Millions of it, to impound that same water on the best agricultural lands we have in our state, namely our river bottoms. I am unable to understand why my government goes out into the countryside with my tax money to pay farmer Jones on one side of a country land a subsidy for building a pond, and goes just across that same country lane to pay farmer Brown a subsidy for draining a pond that the Lord built. I don't understand these things. If someone does, I should like to have them explain them to me.

There are some things about draining I don't understand, and because of the importance of these small areas in the waterfowl production picture, I should like to focus attention upon that problem. I happen to know that right here in the state of Wisconsin you have a drainage problem, and if Ernie Swift is in the audience, I want to call on him to tell us what he knows, or what he thinks about drainage and its effects upon wildlife, and, particularly, waterfowl production. Ernie, are you here?

PRESIDENT SWIFT: In discussing a subject of this magnitude, it is practically impossible to cover it from all angles. I do not pretend to know the waterfowl situation of the North American continent other than what I have read and obtained from facts that were presented to me from men who made the surveys and worked with the problem.

To illustrate the issues involved in the problem, I am going to use as an example a subject that was controversial in Wisconsin for at least fifteen years--the management of our deer herd. When we started out to discuss that subject in Wisconsin, every county figured that they had their own peculiar problem, which they did to some extent. What the people saw in their own back yard, they figured was true all over the state of Wisconsin. A similar line of thinking exists with reference to the waterfowl situation. What the people see in their own state, they often feel is indicative of the nation as a whole. For the size of the state as compared with the United States, acre by acre, I do not believe that Al Day has been criticized any more on the waterfowl situation than I have been on the deer herd management issue. (Laughter)

Wisconsin's waterfowl problem in relation to the United States can be compared to our county deer problem in relation to the state as a whole. There were many people of the state who were unaware of its deer problem, just as there are many people who do not realize the nation's waterfowl problem. As an administrator in Wisconsin, I know something of the waterfowl situation in my own state, although I cannot speak with any degree of authority on the duck situation on the North American continent. I get my information the same place that others get theirs, and I am going to state that I do not believe they know any more about it unless they are in the business of analyzing the duck situation on the North American continent.

In my opinion, there was too much drainage years ago at the turn of the century in the state of Wisconsin. Places like Horicon Marsh were drained for farm land, and, as a result, we had to spend three or four hundred thousand dollars to restore it to a duck area. The same is true in central Wisconsin where farms that originally were estates were settled for four and five thousand dollars on a bond issue of some thirty-five and forty thousand dollars because they were going to make an agricultural Utopia. That was a big mistake.

Nearly every week, someone from southern Wisconsin writes to us protesting some additional drainage in their particular area because of its effect on waterfowl. I am not going to make the statement that just because they write us that the duck situation is going to be impaired. That is not necessarily the case. These areas must be examined. However, the fact remains that there has been a decrease of duck nesting territory in Wisconsin due to drainage. It is ridiculous for us to sit around and discuss whether we are going to allow a bag limit of four or five ducks or allow a thirty or forty-day hunting season, and forget about the fundamentals of having a place for those ducks to rest, to eat, and to hatch. That has been the trouble with our whole system. No one has paid any attention, at least not sufficient attention, to waterfowl habitat. In this connection, we must work with the farmer. Perhaps, we should subsidize him. I do not believe in taking land without reimbursement, and I am getting very critical of individuals and organizations that are overnight Messiahs and who believe that no one ever thought about anything along this line of conservation until they came along and presented their answers. The more work one does along this line, the more involved the question appears. As one goes back, one realizes that there are many other natural resources that must be considered and that the human element must play an important part. The problem cannot be solved without dealing with the people. The fact remains, however, that we are losing our duck areas.

We must take a very fundamental viewpoint with reference to this whole problem and stop quibbling over such minor details as to whether Al Day wants to allow us a bag limit of four or five ducks. I do not always agree with Al Day. Some say he is dictatorial. Some said I was dictatorial on our deer situation. It is impossible for me to agree with him on everything, but I am going to back him one hundred per cent as long as he continues to do the good job that he is doing at present. I thank you. (Applause)

MR. STEEN: Thank you, Emil. I was quite interested in your closing comments with respect to the King who can do no wrong. Whether Al is right or wrong, it is still certain that we are never going to get anywhere until we get at the fundamentals of this thing, and the fundamentals are these, gentlemen: We must do all we can on the breeding grounds to produce as many ducks as we can; including the return to the breeding grounds each year of enough waterfowl to utilize whatever breeding grounds we may have.

I see Harry Ruhl sitting back there in the corner shaking his head. I wonder if you would like to tell us what you think about this problem, or about this discussion, and what your ideas are with respect to international waterfowl management?

MR. H. D. RUHL: We have a situation where we might feel quite complacent with water all around us in the Great Lakes and with quite a lot of inland water here and there. Much of it is not duck water. There isn't any question that we are losing ground in spite of quite a little effort in restoration and maintenance.

We are also convinced we are going to continue to lose ground as far as maintaining the good marshes, particularly in our industrial sections of Michigan. We are building some dams, but we are only doing a small part of what is slipping away from us. I think the key thing of this is that it is an international situation. I have often wondered if perhaps there ought to be some legal way and acceptable way--acceptable to our northern neighbors--for us to do more of our waterfowl work north of the international boundary. I am sure that the opportunities for restoration of good waterfowl habitat in Michigan are rather limited because of industrial and recreational demand for water. I think we are going to have to recognize that we must not quit working. It is all right to needle Al a little bit about the bag limits because I don't think it worries him very much, but I am completely in accord with the idea that in the long-range picture the waterfowl numbers are limited partially at least by how many acres of productive waters you have. It is going to be a big job, a long job, but let's try to bring that two per cent federally-owned waterfowl land up to at least 15 per cent, if we can. (Applause)

MR. STEEN: Thank you, Harry. I was hoping that Minnesota would comment on this matter. They are in the major producing area. Mr. Willard, do you want to speak for Minnesota?

MR. WILLARD: Mr. Chairman, ladies and gentlemen: I can't add much about duck production, but after listening to Mr. Day, and the other speakers, I'd like to say something about the wisdom of taking up drainage starting from the grass roots, because after all, I am a firm believer that if you want to modify or control something, the best way to start is when the project is in its infancy, and not wait until it has reached a stage where nothing much can be done to change things. I have been connected in some capacity or other with agricultural drainage for 40 years, and during all of this time farmers and sportsmen have been at outs with each other as to the value of drained land as a source of added farm income on the one hand and of wild life habitat on the other. My experience has been that the sportsmen's organizations never come near the farmers to present their interests and views before the farmers have started the ball rolling and have their drainage projects on their way. I have yet to see an officer of a sportsmen's organization appear as a witness in court in drainage proceedings in opposition to drainage or in support of marshes on farms for wildlife. Farmers are not unreasonable. I believe if the farmers were invited to sit down with sportsmen and discuss common problems, that a great deal more progress could be made than by criticizing them after the projects have actually started, projects which the farmers themselves expect to finance by assessments against their lands.

I like to recall way back many years ago when there was a petition pending in northern Minnesota for the establishment of what was then referred to as the largest single system of open drainage ditches undertaken anywhere in the world embracing more than 500 miles of drains gridironing vast expanses of peat bog and marginal lands with perhaps the lowest potentials for profitable development of any lands in the state. More than 50 per cent of these ditches have been abandoned and the swamps permitted to return to their natural condition. Yet during the several public hearings held preliminary to the establishment of the system not a voice was raised against the drainage of those worthless marshes by any of the sportsmen's groups. The point I wish to make is that if sportsmen get in contact with the farmer before drainage projects are actually started a better understanding of the interest of each may be had and plans to respect them made before it is too late.

MR. STEEN: Thank you, Mr. Willard. I will now ask South Dakota to add something to this discussion.

MR. N. L. McEACHRON: Thank you for that opportunity. I didn't prepare any figures or statistics for this meeting regarding the subject. Only a few years ago South Dakota was not considered to be a duck producing state. We have our good friends the farmers to thank for our duck production, and it was through innocence on their part, but they have produced wonderful results. When I spoke to you yesterday I told you that we were an arid state generally speaking, therefore in the western and central part of South Dakota the farmers have built many thousands of so-called stock ponds, and we have found that these stock ponds are producing all the way up from one to ten pair of actual breeding ducks right on the ground this year. That will produce an unlimited amount of birds, as far as we are concerned. I think it was estimated last year that it was right close to two million birds that we would produce in that type of area. We are very appreciative of the fact that the farmers have done that for us, as our natural areas are very limited.

One thing that I believe we have been fortunate in this past year, and it was touched upon by Bud Morgan a short time ago, and that was airplane dusting and spraying for insects, and the effect it has on waterfowl as well as our fish life. We recognized the need for control of such spraying, and were given the opportunity by the State Agriculture department of placing a man to sit in on this planning, and I hope you people will be given an opportunity to do the same if the occasion should arise. We got a paragraph inserted in the regulation than an area cannot be sprayed within 10 rods of water areas in the state of South Dakota, without a special permit from the Secretary of Agriculture, and he, in turn, cannot issue that special permit without conferring with the director of our department. I think that is something that all of you, if you get the opportunity to do, will benefit by in regards to waterfowl and fish life, and you will save many thousands of them in that way. Thank you. (Applause)

MR. STEEN: Thank you, Mac. We have just two minutes left, I believe. There are two or three more states left that we should hear from, but probably the most important of them, from the production point of view is another prairie state which lies in the southern range of states, and that is Nebraska. Would someone like to speak for Nebraska? We also have the state of Colorado. Mr Feast, are you present?

MR. FEAST: Thank you, Mel. I will try to be as brief as possible. Colorado is a state of too many. We have too many deer. We have too many elk. We have too many antelope. We have too many ducks, and we have too many geese. The ducks stay in Colorado by the hundreds of thousands. We raise ducks out there by the hundreds of thousands, and we are constantly waging a battle maintaining adjustment between agricultural interests and the wildlife. For example, last year 93,000 big game hunters in the state of Colorado killed 81,000 big game animals. So our problem, of course, is one of adjustment between population and food supply. We have plenty of habitat, plenty of small lakes and ponds.

It is difficult for the hunter in Colorado to understand the national and international problem when the sky and ground is covered with wildlife. The Colorado Game and Fish Commission has complete and full control on all regulations, irrespective of what they may be, for the taking and pursuing of wildlife in the state of Colorado, and I can assure the other states that the Colorado Game and Fish Commission is not going to act to the detriment of any species of wildlife, if they know it. Thank you, Mr. Steen. (Applause)

MR. STEEN: Thank you, Mr. Feast, for presenting the other side of the picture. You are indeed fortunate, sir, to live in a state that has too much wildlife. I would like to point out, though, that yours is one of the young states, with relatively good habitat conditions and low hunting pressure. The future may change that considerably.

In summarizing, I want to say, briefly, that it appears probable that problems on the migratory routes and winter feeding grounds can be solved, that we can do a pretty good job of controlling the take to safe limits, but that the problem of maintaining and increasing, if possible the production of waterfowl on the nesting grounds on this continent is indeed our major problem. If this afternoon, we have been able to focus attention upon that most important problem, the time used in this waterfowl session has been well spent. Thank you. (Applause)

VICE-PRESIDENT LEAHY: The speakers on this next panel, ladies and gentlemen, are goint to tell us "What's Wrong with Conservation Department Press Services." Before I introduce the speakers to you individually, I am going to turn the program over momentarily to Eddie Hein, the discussion leader, who will explain the purpose of this panel. Mr. Hein.

MR. HEIN: Two things have been brought out rather clearly at this convention. One is the need of public understanding of the varied, complicated processes involved under the head of conservation. Another is that land management is such an enormous job that conservation organizations can get nowhere by their own efforts unless the public actively works along with them toward the necessary objectives. The future of the land is still being shaped by what individual landowners do, in spite of conservation efforts, and the feeling is expressed here that the course is still downward.

All conservation departments show by their activities that they feel the need to reach the public. Their methods of public contacts are rather well standardized. We have moving pictures, camps, leadership schools, speaking programs, monthly magazines, bulletins and programs for conservation education in the schools. And there is a recognition of the importance of the press in that the departments do set up some form of press services.

Here in Wisconsin as elsewhere it seems rather plain that a department does not solve its press problems by adding a piece of personnel in that direction. The press is primarily interested in a department where it can readily contact people doing conservation work and get the information it wants. It wants interesting facts. A publicity man in a department should be a help to supply press needs.

Conservation has made a lot of progress. Much of this can be attributed to the fact that the press is devoting an increasing amount of space to the subject and people read these stories because the life of the press rests entirely on its readability. There are a lot of press conservation demands that are not being met. It seems clearly in the interest of conservation to meet such demands as closely as possible.

This association is extremely fortunate in getting the leadership of the working press that we have here today and I know these people have something of value to offer to us. I believe that if we are to turn the conservation corner, it will be the press that will make such progress possible.

Our time is limited here and I just want to introduce the people who are going to talk to you. They represent roughly three levels of the press dealing with conservation. We have here the metropolitan press that employs full time writers in this field. And then we have the smaller dailies where some member of the staff handles the outdoor news as a part-time job. And we have the all-important weekly papers that depend almost entirely on prepared copy.

...Introduction of guest speakers...

VICE-PRESIDENT LEAHY: To start this program off, ladies and gentlemen, I am going to ask Bob Becker to make a few remarks.

MR. BOB BECKER: Thank you, Mr. Chairman. Mr. Hein, co-workers in the vineyard on both sides of me here. I think there is an ironical twist in our being up here today, all of us barefoot outdoor boys. We usually are at the feet of you conservation directors trying to get a crumb of knowledge and bit of news, and now here we are suddenly elevated to the platform handing out a lot of book learning to you guys. So it is rather ironical, but rather nice. I don't know, maybe in a few more years, instead of being considered a pest, we might be considered a little help now and then. How many men in this room are connected with the Educational Departments of the News Department of your conservation? May I have a show of hands, please? Five here.

I have been in this game over 25 years. I read hundreds, if not thousands, of pieces of so-called press releases in the course of a year. I have brought some along today. Would you like to have me analyze a few of them? Would that be helpful to you?

We get many types of news releases from the conservation department. We get some from Manitoba and Alberta, and they are usually late, and I find they are not particularly easy to read. On a large newspaper, such as I represent, we receive a lot of calls. I wish you boys across the line would quit printing stuff such as "Open season on coots starting 460 yards west of the 39th parallel and ending at the Coasacki River will open on September 16th." That requires about four hours of consulting the atlas. If you just use some big city, boys, it would help us out a lot in trying to figure out your laws.

Now, we have reports on fishing. Some of the states are very good on that. We have news letters telling of poisoning of lakes, putting in rainbow trout, and many of your states are doing a fine job of press releases. Then we have the other types. Some are quite boring. I know that the state departments have to issue these to the local communities, but the number of arrests in a certain county is not of interest across the nation. What we want is some of the clever things that your wardens have done. Now, I have hunted with wardens a great deal. I know some of the fine work they are doing, and I think you news boys have overlooked telling us the real stories. You have got to put the fear of the Lord in the mass of the population. I don't care whether it is black bear, or geese or what it is, but get items of interest in to us. I wish all departments would furnish us with more stories of the FBI of the outdoors. I could tell you a few right now after hunting with some wardens in the middle west.

Then we have the features. I have one or two here. One of the most interesting was when one fellow got on the telephone and reported to me the results of a testing station at a certain lake. It showed more than 50,000 white bass, an over population. Oh, boy, is that a story for an outdoor editor. You can imagine the results. The lake was swamped with fishermen, and they couldn't find enough boats. Those little features, you don't get very often from the conservation department.

I was asked about pictures. I think that is about the weakest feature of most conservation departments today. I would like to know how many of you fellows have forgotten about feature pictures? We need good action pictures. You don't have to take a lot of girls, either. Pictures are very valuable to your department.

Boys, if you get the material to us, we will get it out. You have very valuable information and splendid stories. Just last Sunday in my column I had an article on bluegill versus the bass. I had to travel 230 miles to get that story. I sat down with this gentleman that had been doing research for 10 years and got a wealth of material. If I hadn't traveled those 230 miles, that information would have gone through the regular channels and would not have been made public for about five years.

We are getting some fine material from Michigan, Illinois and Wisconsin, especially. Your experiments with your lakes and tests and checks are most interesting. I am speaking for the larger papers now, my working on the Tribune, but we will take that sort of thing anytime to the local happenings.

You don't know what a newspaper can do for some of your projects. You people who are not public relations minded, you directors, you better get hep to what this newspaper can do today with this great, vast number of outdoor people across the nation.

Now, let me run over a few of these news releases, and then I will let some of my co-workers in the vineyard take over. Wisconsin; this should be double-spaced and easy to read. Take some of these states, Missouri, for example: It is readable and has some good material. The one I have before me is a story of rough grouse for 1950, and the material is excellent. Michigan consistently has a very fine Department on Public Relations. They have a shotgun sheet. They have a little scoop about an oil well, and something about a warden, and something about deer. They have been consistently good over a period of years. A suggestion would be to put a heading on them so we can just scan over them and get an idea of whether we want it for our paper. The state of Missouri has a clever system, and it makes for easy reading, especially when we have a lot of these to look over every day. In my mail, it runs better than 10,000 letters a year on dogs, fishing, birds, cats that are caught up in trees, and so on, I have a lot of screening to do. Now, here is Minnesota. The one I happen to have in front of me is a total loss. They have no headings on their pieces, I am sorry to say. One is local, and one is an accident, and another local for Minnesota only. I regret to report that Minnesota's tourist bureau never has come out with a news release that is equal to Illinois, Michigan, Indiana, Wisconsin, and some other states. Illinois does a pretty good job. We have a press agent who picks out the type of outdoor story we outdoor editors like. "Fish are choosy in their diet." Certainly. If you fail to catch fish in Illinois, it is probably because you have the wrong bait. There are many clever ideas in this paper I have before me.

In conclusion, I just want to tell you this, that outdoor writers, unfortunately, don't like to work any harder than anybody else. Now, if you fellows give us stories, we would love to have them. If you have a dog show, and no more than a dog show, when you get the press behind you, you get results. You have got some good stories. I know you have got some dandies because I hunted with wardens. Thank you very much. (Applause)

MR. HEIN: Thank you, Mr. Becker. Our next speaker is Mr. Tuttle, outdoor editor of the Des Moines Register-Tribune. Mr. Tuttle.

MR. TUTTLE:

I am indeed glad to have an opportunity to say these things to the commissioners of fish and game, because the troubles of most newspapers in their relations with fish and game departments begin at the commission level. In this discussion I am not pointing at any one state for my work has taken me to many other states where I have had a chance to observe--or rather, experience --at first hand the attitude of fish and game commissions or departments toward newspaper men. Usually if you are after information that will paint a rosy picture to the public you have no difficulties--although even here the departments are sometimes inclined to take the attitude that they haven't time to spend with you. But if it's a controversial or unpleasant matter the newspaper man is given to understand that he's being too nosey and besides it's none of his business.

The business of a newspaper man is the business of the public, the men and women who make conservation departments--and all other agencies--possible. The public, the sportsmen, the vacationists, have every right to know what has been done by the commission, what they are doing--and what they plan to do. The larger daily newspapers always are anxious to know what has been planned or acted upon by the commissions at their meetings. Most commissions release only what they want the public to know and withhold other information until they feel the time is "ripe" for the public to hear it. Newspaper men generally are not admitted at commission sessions. Yet anyone can attend city council meets or sessions of the legislature without discrimination. There is nothing in the law--at least in our state--that specifies that these commission meetings must be secret. But just try and sit in on those hush-hush deals. It also is a practice by some commissions upon setting game seasons and limits to withhold the announcement until a certain hour in order to favor certain factions of the press. Such pronouncements are spot news and should be handled as such--released simultaneously to all newspapers and press associations immediately the decision is made.

There are dozens of good feature and spot news stories lying on the desks of conservation employes every day but they never see the light of day because there seldom is a trained press relations man in the department to dig it out. Often the public relations departments are under-manned or the personnel is obliged to spend too much of their time on movies, magazines, brochures, education and other projects--all of which are excellent, but none of which really reaches the great mass of people--the public. You don't have to sell your program to the sportsmen and conservationists particularly--it is the general population--the newspaper readers--that you must sell. Another great newspaper medium is being overlooked by many departments in not having available a supply of photographs, both black and white and colored, suitable for newspaper reproduction. In addition to scenics there should be available to the smaller dailies at least a regular service of news pictures taken by a photographer who has had newspaper experience or understands a newspaper's needs. No morgue of pictures collected over a period of 20 years will fill the bill.

Overworked public relations employes in their zealous attempt to put out a good magazine, for instance, frequently ties up material that would make good news or feature stories for the daily press and wire service--simply so that he can put out a readable issue. But that magazine usually reaches less than 50,000 readers, a mere drop in the bucket compared with the potentiality of the daily newspapers. Conservation departments, along with many other governmental agencies, are prone to give to the press only what they want the people to know. Usually a frank presentation of a program or situation that will allow public consideration will be much better received than when it is sprung upon them without warning--and without recourse. If we are to sell conservation we naturally must sell it to the children. But before we can successfully sell it to the children we must sell it to the Great American Public--the newspaper readers--and that includes many children too.

Bulletins generally contain routine stuff--season openings, regulations, etc. More stress should be laid upon news. A public relations man should be digging out stories bottled up by biologists. Tips should be passed on to newspapers. Let the people know what they would like to hear--rather than what you want them to hear. Most industries do a far better job of press relations.

MR. HEIN: Thank you, Mr. Tuttle. We are coming back to Milwaukee for our next speaker, Mr. Gordon MacQuarrie, Outdoor Editor of the Milwaukee Journal. (Applause)

MR. GORDON MAC QUARRIE: Ladies and gentlemen, as I came to the microphone Bob Becker said, "Give 'em hell, Mac." Actually, I don't feel constrained to do so. Especially insofar as the Wisconsin Conservation Department and its public relations people are concerned, at least in the last eight or ten years our relations have been very, very happy. In the beginning they were not, because I was one of the first outdoor writers in the state on a full time basis, and I remember that such a fact took some of the boys in Madison by surprise, and I was greeted with a cold shoulder in many places. The situation shifted very quickly, however, when it did, and in the course of time that was ironed out. I might say that one of the reasons for that was the fact the late Aldo Leopold knew the value of public relations, whether it was a newspaper, a magazine or what, and he gave me great encouragement and great help, and he was a great friend in addition to that. He was very valuable.

I have no particular suggestions to make. I think that a newspaper reporter, if he is willing to go out and dig up something, he will have no trouble doing so. Take the Illinois National History Survey, through Mr. Bennet, it has made great strides in fish research, let us say. Bob, let me compliment you on that story you had last Sunday. That is an outstanding piece of outdoor journalism. I clipped it out and I am going to steal it and use it in the Journal.

The reporter needs the assistance of the public relations man. He can't depend upon himself alone. He wants to have him give the various wildlife topics new life. To get real outdoor stories, it must come through close cooperation between the reporter and the wildlife fieldmen. A wildlife man who holds stories from a newspaper reporter is making a mistake, a very serious mistake.

I have one suggestion that just popped into my mind as I sat here: Here in Wisconsin we have got about five newspapers that are doing quite a bit about outdoors. There is Al Rice over there on the LaCrosse paper. There is the Eau Claire paper, and the Madison paper, the Milwaukee Sentinel and Milwaukee Journal. My suggestion is that at some meeting of the League of Wisconsin Newspapers, that some sort of a program be prepared to impress these gentlemen so they would get behind this thing. Probably the best way to do that would be for the directors or their business managers to come to that meeting. I think that is a good idea.

I was astonished to hear that in Iowa your meetings are not open to the newspapers. That certainly hasn't been true in Wisconsin in the 15 years that I have been working at this job. Here is another thing that should be made known: you conservation men should trust your newspaper men. I have never in my life known a newspaper man to betray a confidence knowingly.

That fear of the man of science that a newspaper fellow is going to make me look like a jackass, I think, is diminishing. I think there is quite a change in that now, and part of it is very likely due to the fact that there has been the assurance through experience and results that has shown that to be true.

In closing, I want to assure you as far as the newspapers are concerned, and I know everyone here representing their paper is representing such a paper, you will find the reporters and editors right down at the bottom of the pile where the fight is going on in this conservation battle. Thank you. (Applause)

MR. HEIN: Thank you, sir. Now, we will hear from Mr. Henderson of the Associated Press of Milwaukee. (Applause)

MR. DION HENDERSON: Thank you. Ladies and gentlemen, the previous speakers have taken up most of the routine which would be of interest to you, but I would like to pick up this discussion of getting the information to the public, where Mr. MacQuarrie left off. The conversion---if you like that term---of important people in the newspaper business is something many official agencies have attempted through more or less contrived "news" stories. They have failed to talk of progressive resource management. The whole subject is something which, as far as I know, has never received any serious attention at all. Frequently we have to dig out such stories, when there is a need to clarify and explain situations--not only to the public but to the newspaper membership. In Wisconsin, I know that Mr. Swift, particularly, has made it a point to contact managing editors and publishers. Routine information ordinarily is directed to the sports editor, but Swift has made certain that matters of larger than sports-page interest are understood, the managing editor's desk. We writers who know that news executives must be convinced of a story's importance before giving it space, appreciate his efforts very much in this respect, and try to cooperate as much as possible.

Another phase of publishing is of interest to those of you who deal with wire services. The wire services are not interested primarily in the "bulletins", the copy of which is old or which was distributed widely to the newspapers. Wire services are particularly interested in news as it develops, in the background material of interest to general readership rather than to highly specialized groups. There, sometimes, the problem is not in getting the information we do want, but in not getting all the information we don't want. The deer situation in Wisconsin was one which was helped along, I think, by the utmost cooperation of the Wisconsin Department, from the director of conservation right down to the fieldmen, and all the information was made available to us. The findings of the biologist and scientist were there if we wanted it, and the personnel was available to help us.

I think that the public would give greater support to things like the Wisconsin deer management, the grouse cycle problem, various kinds of pheasant manipulation, and waterfowl restrictions, if it knew more about the basic theories of management, and if biologists would point the way toward which all the departments are working. Dr. Aldo Leopold used to talk about making people see the Vision, a dream-world in which the ecological tyrant, man, at last would be integrated into the wildlife community. If there is any way we all can work to bring that about, why, that is a project large enough for us in the future. Thank you. (Applause)

MR. HEIN: Thank you, Mr. Henderson. Al Rice, Outdoor Editor of the LaCrosse Tribune. (Applause)

MR. RICE: In dealing with any subject that has as many ramifications as the conservation field, it is necessary to be frank. And when it comes to the matter of public relations in conservation, we must be even more frank than otherwise. There are few conservation departments, and the field also includes federal agencies dealing with natural resources, that have good public relations departments. The idea has been through the years that they are surplus baggage, that the public doesn't have to know what's going on unless the "king bee" in the picture decides it might not be harmful to let them in on something once in a while as a sort of pacifying gesture.

It has been only in recent years that there has been an awakening in the states to the need of improved public relations, due largely to public demand for information. But, public relations departments as such are only half-hearted parts of conservation departments. They have little personnel, and often the person assigned to the job is expected to carry out other duties in the department. We must take the shackles off our conservation department public relations offices, and that involves both state and federal governments. Publicity departments are your contacts with at least 95 per cent of the persons in each state. What we need is a change of attitude concerning publicity, for it is a type of education that is a cheap investment, especially when the demanding public pays the bills through license fees and taxes. We need department heads who realize they cannot bottle up or dictate the type of publicity to be given newspapers.

We have to get over the idea that the only persons in a conservation department who can write are the biologists and research men. People want information and not a hodge-podge of words. Our writing has to be in the language of the common people, the ones in the majority when it comes to licenses. We must expand our public relations departments, making them in a sense separate agencies. They must be given an open field. As far as the public is concerned, they are expected to talk about failures as well as successes in conservation fields. And that involves the expenditure of money, too. When you create a condition of willingly giving to a public that pays the costs all of the information about conservation functions, you ultimately will break down opposition to development, expansion and changing policies.

You talked at length this morning about water resources. You heard a fine talk by Chester Wilson of Minnesota. You talked about the lack of understanding on the part of the public in some states. But, have you figured out why there is a misunderstanding public? Is it because you are lax in not presenting the problems involving such an important issue to the public in a clear, understanding manner? There is no reason why a department has to hide costs of any of its conservation activities, methods of operation or policies. Then, too, in our public relations we must pay attention to our boys and girls. We must make conservation education in our schools mean something more than just a subject they have to take. We need a well planned program of youth education in conservation that will interest youths through a program of actually doing things and not through textbooks. By proper education of youth, conservation interests will be moving ahead through a medium of creating allies of the future. You must remember this. Conservation is one thing about which everyone knows something. Throw the book at the public in all things and not just when you have a particular axe to grind. You will find a more general support than you ever imagined was possible.

MR. HEIN: Thank you, Mr. Rice. Now, ladies and gentlemen, Miss Joyce M. Larkin, Editor of the Vilas County News-Review. (Applause)

MISS LARKIN: I am making a 500 mile trip to be present at this meeting--that shows you to what lengths a woman will go for a good cause. I have been asked to talk on "What's Wrong with Conservation Department Press Services". There is nothing particularly wrong with them in the state of Wisconsin. You might think this would leave me without anything to say, but it doesn't. There are some suggestions I would like to offer--some remarks which probably can be filed "for future reference".

America is a great aggregation of separate communities. Each state is also an aggregation of separate communities. Serving these communities in Wisconsin we have 317 weekly newspapers and 41 dailies, four of them foreign language. Because of their size and their big circulation figures, dailies dominate the communications field. Too often the weekly newspapers are overlooked. They offer a degree of readership penetration and response that is always amazing. Contrary to the dailies, they are read and re-read, as many as four times during the week, according to a national survey.

This survey also revealed that every member of the family reads the weekly at sometime during the week. The weekly is read not only by adults, but by teen agers, and, most important of all, by community leaders. It isn't used to wrap the garbage or light the fire until the new weekly issue arrives, and sometimes not even then. Weeklies are read with such intensity because the news is about people readers know. It is news they can't read anywhere else. This leads us to one of the fundamentals of weekly news reporting--it must be local--it must be grass roots--it must be about people or places weekly readers know. The weekly newspaper deals with the familiar, and its readers never tire of it.

If conservation department press releases are to get published in weeklies the releases must be slanted to the local scene. What is the basic philosophy of weekly readers? What are they thinking? What interests them? Too often press departments overlook a key person in getting information on what weekly newspapers want--the local warden. He is a very important person in the public relations program, and equally important in the news field. He is the one who can make the surveys for you--tell you what people in his field are thinking, what they want to read, in what they are interested. He is your direct contact with the local editor. Dailies have the opportunity of calling at all the offices in Madison. Daily outdoor writers can ask for the news they want. Weeklies are too far away from the main office at Madison, and weekly editors, who are usually the only ones on the news staff anyway, do not have the time for these calls. They have to rely on the local warden or any field men in the community.

Now here's something that probably could be called wrong about the average department press service. Say, for example, I want a story from the fish hatchery. I call the local man. He is a bit reluctant to give me the facts. He suggests he will get the facts for me and call me back. At any rate, he wants to clear the story through Madison. Now I am well aware of the fact that there are matters of policy to consider, that a lot of off-hand statements have caused trouble in the past, and that an ill-advised statement could cause trouble in the future, so I understand the hesitancy of the local warden or fish hatchery man or game man.

I know, in Wisconsin, there is no censorship or suppression of news, but the local man hesitates to give news because he lacks confidence in himself. He wants to check and also to have someone else take the responsibility. This leads me to suggest a series of training schools for all men who have direct contact with local editors. At such schools they can be thoroughly familiarized with the policies of the department to avoid any off-the-record news releases. They can also be taught what a local news gatherer would like to know--the who-what-when-where-why-and how of a story and they can be given confidence in themselves as news sources. This would give more flexibility to conservation news sources, especially in the field. Now, by the time the news gets back and forth, either it's dead or someone else has it. After a couple of such experiences, the weekly editor gives up and goes after news that's easier to get.

Along this line let me also suggest that it might not be a bad idea for the conservation department press services to establish an editorial board and meet for regular conferences on news stories and news trends with working newspaper people. In this way the press service can keep in close touch with their newspaper outlets. Probably everywhere you look in Wisconsin you find some matter of conservation interest...its very geography makes this evident. Here is a state of lakes and trout streams and some of the last remaining forests--and whatever happens to any of these is news. Especially to weeklies. This news does not compete with news of wars and battles, of taxes and deficits, of political battles on a national scale. Conservation news is big news in itself, and gets headlines and front page space. It can be news about the new warden, about a sportsmen's club meeting, about airplane spraying to kill off spittlebugs. The news of the building of a pike rearing pond or a trout rearing pond in the county is far more important to weekly readers than the TVA development. Weeklies want facts--what trees mean on watersheds--the habits of certain types of game and birds and fish--lots of features.

I was amazed at a recent contest among the state's weeklies when I learned the judges, from out-of-state, criticized Wisconsin weeklies because they ran so few editorials. Here is a place where press bureaus seem to be overlooking a very good bet. We run a conservation editorial a week--and believe me after years of doing this a suggestion or some information on a conservation subject for an editorial is very welcome. A general summary of some new ideas or some complete projects might be sent to the weeklies of the state for "future reference" or as "suggestions".

Another thing I would like to urge all conservation press services, watch your language. I have done some free lancing for the Wisconsin Agriculturist and Farmer and sat in on a number of their news staff conferences. All they want is to be sure their articles are being read. They even send out men and women and pay them to check with farm families to see what articles are read, how much of each article is read and what pictures are looked at. They have developed almost a formula because they are writing for seventh grade readers. Don't forget, you can write interestingly and excitingly at a seventh grade level and get college level readers too.

This does not mean you should write down to your readers. Journalism is not cheap and shoddy save in the hands of cheap and shoddy journalists. As George Bernard Shaw said, making due allowance for his well-known technique of exaggeration, "Journalism is the highest form of literature, for all the highest literature is journalism. The writer who aims at producing the platitudes which are 'not for an age but for all time' should remember Plato and Aristophanes trying to knock some sense into the Athens of their day, Shakespeare peopling the same Athens with Elizabethan mechancis; Ibsen polotgraphing the local doctors and vestrymen of a Norwegian parish. They are still alive and at home everywhere among the dust and ashes of thousands of academic, punctilious, archaelogically correct men of letters and art who spent their lives haughtily avoiding the journalist's vulgar obscession with the ephemeral."

It is fine if you can bring the scholar's culture, the scientist's accuracy and the poet's beauty to your prose--if you achieve a writing technique that will be simple and clear and intelligible to the man in the street--and that does not mean writing down to him--it means becoming a better writer. There is nothing shoddy about making intelligence intelligible. There is no reason why culture should speak a private language that none save the initiated can understand. There is no reason why accuracy should be unreadable. There is no reason why beauty should be walled about by an absurd vocabulary that ordinary mortals cannot penetrate. Don't underestimate the intelligence of your readers. Don't speculate about writing over their heads or writing down to your readers

and spend more time finding out what is going on inside the heads of your readers. Don't work on the belief that the American mind must be amused or interested, but must not be challenged. (It was challenged in Wisconsin with the any-deer season). Don't overestimate the information of your readers. William Hazlitt suggested it is always safe to assume anew each morning the world's ignorance--the lowborn journalist may often underestimate the information of his readers. Assume they are intelligent, but don't assume that they have as much detailed knowledge as you have about the thing you are reporting.

There is a whole school of thought which believes that we must intrigue the reader--interest him, capture him, shock and startle him--and so we have the dealers in sensation. However, weeklies want articles which show the writer is concerned with his readers best interest--saving forests, protecting waters and wildlife-- and such writers are social statesman. Write in the vernaclular. Sloppy slang is not vernacular. Foggy jargon is not vernacular. The rank and file of readers do not talk in the language of popular articles any more than they talk like sophisticated highbrows. Weekly readers are a lot like farmers--they are shrewd, kind and suspicious. If you want to drive them away, just assume an air of superior culture or artificial chumminess. Timing is important. On state-wide news, we would like to see a Thursday release date for all newspapers. For example, a daily newspaper in our area carried news of the squirrel season this past Saturday. I have to run that news the following Thursday. It looks as if I had to depend on the daily for the news. The daily gets credit for getting the news first, and I for copying it. You can see how that would make my flesh crawl.

It seems to me that all the best conservation news is released in time for the week-end, and that we are eternally waiting for the following Thursday to publish it. If the news isn't about hunting or fishing regulations or of very general interest, we simply leave it out. The story is dead for us. In that way the department loses much of its space simply because of bad timing. You might be interested in knowing why many releases find a home in the editor's waste basket. The Industrial Publicity association working for big business press and publicity departments recently surveyed hundreds of weeklies and dailies on the type of news which never saw the color of printer's ink. Here is why many news releases found no editorial welcome:

75 per cent of the news couldn't possibly interest the publication
33 per cent was rejected because it was too full of puffs--too flowery
27 per cent failed to give the name of a person from whom more information could be gained
20 per cent was vauge on time and date and source of news
20 per cent offered old stuff as new
20 per cent didn't send a summary with a long report
20 per cent didn't type or paste captions on the backs of pictures

You might check your releases against a list like that.

When I first came to Eagle River I said this was going to be a conservation paper. Everyone said, "Well, what would you expect from a woman...poor thing, she doesn't know any better". They were right. I didn't know any better. However, I learned, and learned the hard way. In some quarters I am still not accepted as knowing anything about conservation because I don't fish and hunt. Now I am going to give you as difficult assignment. Why do conservation releases ignore women? Over 70 per cent of the private wealth of the nation belongs to women. Over 55 per cent of the savings accounts are in

women's names. They own 50 per cent of the stock in corporations and own over 33½ per cent of all industry and 44 per cent of the public utilities. They own 40 per cent of the real estate and inherit 68 per cent of all the estatites and are beneficiaries of 80 per cent of the life insurance. They spend 85 per cent of the family income and buy 80 per cent of the nation's consumer goods.

What appeals to women? Well, that might be worthy of some study. Always there is the emotional appeal--They tell me they like an editorial something like this.

"Nature teaches lessons in living--you see the rocks in a river and you note that the more there are, the more the river applies itself to them--the more it laughs and the more energetically it keeps going and that's not a bad pattern for meeting the obstacles of life--a blue heron walking slowly, slowly step by step, looking for his meal, shows the value of patience and self control. The beaver, the bee and the ant show the value of working for a common good. Withering grass, the fleetingness of earthly things, but each seed waking, each new plant breaking soil symbolizes the glorious promise of resurrection and abundant life anew.

"You come to know just a little of what is part of creation, the wonder of growth, the multiplicity and variety of things, the regularity of times and seasons.

"Out under the sky you discover many things--that you may break your back packing in supplies and portaging a canoe, but you'll never be broken hearted; you may freeze your ears and have your nose frost-nipped, but you'll never be given the cold shoulder. You may return from a visit with nature empty handed, but you will never return empty hearted."

Many women tell me they clip these things for scrap books. The above is definitely an emotional appeal. However, woman are very practical. They understand the implications of an empty cupboard in their home and the implications of an empty cupboard in nature. For the past six years I have been talking to women's groups and they want to know what can be done to save the soils, the forests, the waters, the wildlife and the minerals. They want to know about roadside beautification, parks, reserves and wilderness areas--they are thinking of their children.

Along this line, why has no one ever compiled a cook book about how to take care of wild meat, how to prepare venison dozens of different ways, or duck or pheasant or the value of potato meal in frying fish, or the use of aluminum foil paper in baking fish. What about some good camp fire recipes. What about some maple syrup suggestions, or some blueberry, blackberry and wild raspberry jams, conserves, pies and muffins? What about timely releases on these matters--for the opening of the fishing season, for the duck hunting season--for the squirrel hunting season and the deer season--a series of recipes, household hints and advice. How about some practical tips on what to do with the deer hide?

Women are very loyal--if you doubt this look at their loyalty to their women's magazines. They are loyal to the things in which they believe and they love causes. They can vote you out of business if they do not understand what you are doing or why. Life insurance companies once concentrated their attention on the men who signed the application blanks. Now have you noticed they are making a direct appeal to women. The liquor industry, realizing prohibition movements spring from women in rural or small town areas now slants a large per cent of its advertising toward women.

The New Yorker runs a series of amusing ads with the caption "Never Underestimate the Power of a Woman". Just as an example--Sinclair Oil wanted to put its refinery workers, largely for safety, into uniforms. The employees rebelled. They said they weren't going to be dressed like Roxy ushers. The company then appealed directly to the wives. In a letter the company said that uniforms would prevent accidents and promised to launder them. It asked the wives how much soap they used to get the grease out of pop's pants. Within a few weeks male objection to uniforms disappeared. Don't forget that women can be reached through their editors. Women know the editors. They bring to the editorial desk a vast assortment of club notes, society notes, news of musicals and flower shows. Very few men have contact with the news offices, but women do not overlook this source of publicity. They are also inclined to accept information from people they have come to know and trust.

Just to summarize, and from the weekly angle,

1. Get the news out fast, be sure it's accurate, and don't forget the "you" approach--that would be "yawl" down South.
2. Watch your timing so that all newspapers get the big news at the same time. Play no favorites.
3. Give the news the community wants to read. The news that appeals to local readers and fits the newspaper's policies.
4. Meet the editors.
5. Don't overlook the importance of the wardens and the men in the field. Give them a chance to speak, train them how to give out news and give them a chance to do the local newspaper a favor by giving out the news--it adds to their prestiage to be quoted and benefits the department.
6. Be frank about unfavorable news--none of that "No statement now" business. If the news is bad, say so--it sometimes gets a more sympathetic handling. Misunderstandings can be corrected on a local scale, where it counts.
7. Let no reporter cool his heels in the outer office. Adopt the "open door" news policy.

It might be well for all of us to remember the advice of Alexander Graham Bell who said, "don't forever keep on the public road, going only where others have gone. Leave the beaten track occasionally and dive into the woods. You will be certain to find something you have never seen before. Of course, it will be a little thing, but do not ignore it. Follow it up, explore all around it--one discovery will lead to another, and before you know it you will have something really worth thinking about to occupy all our attention." (Applause).

VICE-PRESIDENT LEAHY: Thank you, Miss Larkin. Gentlemen, we have sat through hour after hour of panel discussions over these years, and I don't know of any, in all of the years, that has been more interesting and more imformative than this panel discussion. I want to turn the program back to Ed Hein to just summarize this discussion.

MR. HEIN: I think one point was made very clear here, and that is you are not going to satisfy all the press with the shotgun service which I think all departments do. For instance, things that have been said here today, Miss Larkin would have a use for some material. Larger papers would not. It takes a specialized service in order to do a satisfactory job.

If there is anybody here who has any questions or who has anything to say, we would be glad to hear from you. I feel that the association certainly owes a vote of thanks to these people who have traveled hundreds of miles to come in and add their bit to the conservation program, and I know they have done a grand job. (Applause).

...President Swift made an announcement...

...The convention business session was adjourned until 9:30 o'clock a.m., July 26, 1950...

WEDNESDAY MORNING SESSION, JULY 26, 1950
(General Chairman--President Ernest Swift)
with H. T. J. Cramer substituting part-time)

PRESIDENT SWIFT: Gentlemen, we are going into the last morning of this meeting, and I don't think there needs to be any preliminary remarks. The subject this morning is "Is Artificial Pheasant Stocking Sound Management?" On the panel will be Mr. Ruhl of Michigan, Dr. Martin of Ohio, Mr. McEachron of South Dakota (taking the place of Elmer Peterson), and Mr. Grimmer of Wisconsin. The discussion will be led by Mr. Harkness of Ontario.

I will give you the chairman of the panel, Mr. Harry Ruhl.

MR. RUHL: The question, "Is Artificial Pheasant Stocking Sound Management?", when put to a state agency, should be considered entirely on a business basis. Inasmuch as license funds are used, we are compelled to consider results to the gun.

As the question is stated, there is no unqualified, absolute, yes or no answer--unless it is intended to cover the general situation now existing in the midwest states.

Original stocking in areas suitable for pheasants but without any stock has demonstrated its soundness in the past. Now, however, in most if not all of the midwest, pheasants have been established through their suitable range. It is my contention that, as a general precept, continued large-scale pheasant releases throughout Michigan pheasant range can no longer be considered sound investment of hunting license fees. It is recognized that temporary or local conditions may exist in any state so that continued experimentation and occasional releases may be sound in areas which for one reason or another have been subjected to some catastrophe or unusual circumstance wiping out all stock.

Let us then discuss the situation in its broad and general phases first.

It is fun to raise pheasants. They are brilliant and colorful birds. I believe most administrators like to raise and release things, too.

As a hunter--who has owned bird dogs for many years, who has hunted pheasants consistently each year in Michigan for more than 20 years--I am very naturally and very selfishly interested in a maximum pheasant crop in Michigan.

As a professional conservationist in charge of game affairs, I would certainly want and do strive for the highest possible pheasant crop. There is every reason for me to want to do anything that is at all practicable to insure or increase the size of that crop.

Most of us are tempted to agree with those who want to increase our operating budgets, number of employees, and operating plants. Many hunters do not analyze complicated problems critically. It is a field which requires special background and experience so we cannot expect the average hunter to be too proficient at it. Many assume that if releases once paid off the program should be continued. They are apt to reason that if one game farm has produced a kill of a million birds then two game farms would produce a kill of two million. This is understandable but it doesn't work. It has been demonstrated too often in agriculture to need repetition here. It usually is easier for the conservation agency to do what people want than it is to sell them on a new approach.

Most game administrators have the same selfish and personal motives, as well as their professional concern, to do everything economically feasible to build up pheasant numbers.

In spite of these temptations and natural inclinations, it is my strong and firm conviction, based on extensive and detailed research and analysis, that large-scale general pheasant releases, at least in Michigan and probably in the entire midwest, at the present time are largely a waste of money. There are basic fundamental reasons why such releases don't pay.

The pheasant is well established in all of its suitable habitat in Michigan. Limited releases originally established the bird in the state so that shooting was permitted in 1925, within eight years of the initial state stocking program. The average annual release during that period was about 1/3 of Michigan's present yearly releases. Pheasants have since thrived in the wild, in the suitable range, and supply enough cocks in an average year for a harvest of about a million birds.

Pheasant range in southern Michigan varies from poor to excellent. No amoung of restocking can change this inherent quality of the land. Improving habitat and interesting land owners in maintaining suitable environment for pheasants is the only way to alter that situation on the land. It, too, has its limitations.

Since there is a well-established population, all suitable habitat in Michigan has a native seed stock providing ordinarily as many pheasants as the land and current conditions will hold. In pheasant lows, seed stock may be temporarily inadequate, but still vastly superior to any numbers of pheasants we could possibly release.

For example, in Michigan we now have at least 1¼ million wild, adjusted, potentially productive hens. Wild birds are hardy, used to shifting for themselves, and produce more young than do captive stock which have not yet learned to adjust themselves to conditions in the wild.

All of Michigan is a refuge for hen pheasants--since we don't shoot hens. Regardless of our cock harvest, production of pheasants is unaffected by hunting except where illegal hen kill or winter losses may deplete hens below the next spring's threshold.

Shooting cocks does not interfere with next year's crop. Those who are concerned about overshooting cocks have only to study the record of intensively shot areas such as the Prairie Farm in Michigan where no limit to the number of hunters was exercised for many years and where the ratio rose to about 9 hens to 1 cock. Studies here indicated that normal production of young raised the population even under hunting pressure of as high as one hunter per 6 acres on opening day.

Experiments at Rose Lake Wildlife Experiment Station, which has no limitation to the number of shooters indicates about five times as much gun pressure as most of the Michigan pheasant range. In spite of this heavy pressure the ratio of cocks to hens has never reached a dangerous point.

In Michigan the closing of several marginal counties for as long as nine years consecutively has failed to indicate any measurable difference in the pheasant population from those in adjoining counties of a similar character in which the season was open. In other words, we have demonstrated that in marginal territory, at least the prohibition of pheasant hunting coupled with releases has not made a measurable change in the pheasant populations there.

Thus, artificial propagation can never compete with this natural production in Michigan. Supplementing a one-million cock harvest with the release of a few thousand game farm birds cannot materially change the hunter's bag. Even if all the released cocks found their way into hunters' bags (which they do not), Michigan's largest release in 1949 could have produced a maximum of only 4% of the total kill of that year, in spite of a low wild population. Our average cock releases are less than 1% of the total kill.

Released birds do not thrive well in competition compared with wild ones and the result is wasted funds. In Michigan, and in other states as well, band returns and studies on sample areas show that despite occasionally better results on the average less than one out of three cocks released is taken by hunters the first season, and practically none survive to the second season.

Another fallacious argument is the vociferous plea to stock pheasants during our periodic pheasant slumps. The answer to that is obvious. If something is inhibiting wild populations so the wild stock decreases from year to year, what chance do our poorly equipped game farm birds have?

Pheasant stocking cannot prevent a state-wide cyclic slump or materially speed the recovery following one. Pheasant population fluctuations during the last slump were continent-wide. All pheasant states were affected regardless of the number of birds stocked. Wisconsin, with the country's most ambitious release program, seemingly saw pheasants drop as fast and to relatively as low a level as other pheasant states. Furthermore, recovery in Wisconsin appears to be no better than other states with small release programs. No states with larger release programs appear to be recovering from the slump more rapidly than Michigan. In two years our kill has taken a 90% jump, and yet our stocking effort is lower than that of most other states.

The fluctuation in the pheasant numbers appears to be no more extreme or rapid than in many other species such as ruffed grouse, sharptailed grouse, snowshoe hare or cottontails. Such cycles are well-known. Both sexes of those species are taken in hunting. If bolstering is needed for any species, it should apply much more strongly to those species in which females are taken in the hunting season than to those under which it is feasible to shoot only males.

The evidence indicates that these species which have some periodic slumps recover as rapidly as pheasants have with stocking.

A comparison of the kill and the stocking in the better pheasant states where that information is available fails to show a correlation between the releases and the kill. (See chart "Pheasant Releases and Kill in Principal Pheasant States, 1938-1948, Form Ga-163). If we insist that there is a correlation and that we want to have maximum kill, we should follow the lead of the states which have the highest kill, not the highest releases. The two leading states, North Dakota and South Dakota, have not had game farms for many years.

See second series of charts. These charts indicate the kill and releases in the individual years under consideration. The solid lines are calculated kills; the dotted lines are the annual releases. Examination of these charts fails to show correlation between the numbers released during the period of study and the kill in those states which are major producers.

It is the consensus among conservationists who have studied this matter and analyzed it thoroughly that continued stocking of an established species on productive range is not sound game management. The country's leading authorities agree almost unanimously that license funds are better spent for other activities than for such artificial propagation. I wish to quote from the leaders in this field, taking samples from many states. (See "What are They Saying about Pheasant Re-Stocking?").

We have already discussed the role of general stocking. Let us now consider special situations, such as a catastrophe.

In an area which has proven to be suitable for pheasants, where environmental conditions have not changed too much, but where there was some catastrophe like a winter kill, it is certainly well to consider releases immediately following the catastrophe. Winter kill has been known to occur in Michigan--so far neither extensive nor severe enough to justify large releases.

Put-and-Take Shooting

The last ditch argument for continuing high game farm output is that gun pressure is so great that birds must be released to satisfy the guns. The shooting preserve is essentially a put and take operation, although some habitat work is done. I understand private shooting preserves are considered to be a useful management measure in Wisconsin. They operate much as the shooting preserves in Michigan from 1929 to 1936. Because of sportsmen's objections, the Michigan legislature amended the shooting preserve statute in 1937, so it is no longer workable. Under this system a group controlled the shooting rights on specific areas, and released pheasants for their own shooting. These projects were under supervision of the state conservation agencies and regulated so that the management applied by the participants would not handicap or penalize those who depend upon wild birds outside the preserve.

So long as the participants finance the management and do not handicap or penalize those who do not belong to their group, and so long as the program is generally accepted, I see no objection to it. It cannot be demonstrated, however, that such a shooting preserve can be operated with satisfactory results to the participants on a fee equal to the small game license. It, therefore, becomes a special situation and should be considered as such.

I believe the operation of a shooting preserve is a proper sphere of activity for private initiative rather than a state agency. It is obvious that a hunting group with common interests can make arrangements with individual land owners more satisfactorily than the state can for them. It would be easier to adjust their hunting rules and regulations, the number of birds, and other conditions to their needs than could be done by an official agency. The role of the conservation agency is to supervise the activity and to referee differences between the operators of the preserves and the general public shooting interests outside.

Field Trials

Stocking might well be considered where the release has special value in addition to furnishing targets for the guns. I am thinking of field trials. I see no reason why birds might not be released for field trials to insure action by the dogs in places and at times of the year where the wild birds are too wild or are not adequate for the purpose. Again, these special situations do not justify, in my opinion, the maintenance of a state-wide over-all release program.

Experimental

I have no quarrel with releases to determine whether there are any other unexplored or unused opportunities for stocking which can be economically justified. These need not, however, be state-wide. They certainly should not be subject to or reason for state-wide programs. Only when and if well conducted experiments under terrain, situation, opportunity, or environment which demonstrates the effectiveness and economic soundness for new releases should they be applied on a large scale.

It is my contention, however, that special projects, such as field trials, and experiments are exceptions to the general rule and need occupy but a small percentage of the total area in a state.

These special programs are not apt to require large release programs.

I think we are all agreed that the production job being done by our wild pheasant hens is far more important than any practicable release attempt. It would seem to me that our efforts should be toward building an attitude among sportsmen to observe the protection of hen pheasants. This would supply all of the breeding stock necessary for stocking the land according to its own limitations. Instead of discouraging illegal hen shooting a large release program is apt to inadvertly encourage those who are tempted to shoot anything and then rationalize their actions by saying, "Well, the state will plant some more anyway". If there is any significance to it in this respect, the argument seems to be all in favor of no releases to minimize illegal hen killing.

If sportsmen's clubs want to raise pheasants for the fun of it, for the entertainment of it, or for club interest at their own expense, why should anyone object--unless careless handling of the birds distributed poultry diseases so as to actually destroy or place a hazard to the wild populations.

In summarizing, may I say it is fun to raise pheasants; it is tempting to have your budget raised; it is tempting to go along with the people when they want to do that; as a hunter and a conservationist, it is natural to strive for an increased crop of pheasants. In spite of that, I cannot recommend large game farm production for Michigan because all of the evidence indicates that it is largely a waste of money. We believe that the money could be used in other ways more advantageous to the sportsmen.

Properly supervised put and take shooting by private initiative and expense may be sound in some areas, particularly those which cannot carry a shootable wild population through the winter. They do not justify general public release programs.

I challenge the proponents of larger state-wide pheasant releases where birds are established on suitable range to present exact statements or quotations from publications by recognized professional conservationists who favor their idea--if there are any. Certainly the written records are almost universally on the other side.

PRESIDENT SWIFT: Thank you, Mr. Ruhl, for your fine paper. The next speaker on the panel is Dr. E. D. Martin, Chief of the Bureau of Game Management and Propagation from Ohio. Dr. Martin.

DR. E. D. MARTIN: Mr. Chairman, ladies and gentlemen. I am going to make this talk rather brief. Ohio started about as early as any of the states in artificial propagation of pheasants. Three types of programs have been used:

(1) The distribution of pheasant eggs to farmers and sportsmen's groups that was started in 1926 and discontinued in 1938 because this program was of questionable value in increasing the pheasant population.

(2) The egg distribution program was replaced by the cooperative pheasant chick program. In this program the state either hatched or purchased chicks and raised them until they were three weeks old when they were placed with cooperators who cared for the birds until they were old enough to release.

(3) Incubating the pheasant eggs and raising the pheasants under range conditions so that the young birds are hardened to natural habitat conditions before they are released.

Between 1930 and 1940 approximately 50,000 game farm cock birds were banded before releasing them in an attempt to find out the percentage of total banded birds killed by the hunters. The results on a voluntary reporting system was as follows: low - 1.2%, high - 9.2%, making an average of 5.49%.

In 1949 the state pheasant propagating program cost $107,271.89 to rear and release 63,693 immature pheasants, making the cost for each bird approximately $1.68.

The calculated kill of pheasants in Ohio for the 1949 season (Dustman, Ohio Wildlife Research Unit, Ohio State University) was 1,042,500. Assuming that the sex ratio was about equal in the 63,693 game farm birds released in 1949, the kill of game farm cocks should represent, if all survived, approximately 3% of the total calculated kill.

Based on the cost and livability of game farm birds after they are released, Ohio administrators believe they can be justified for stocking purposes only where weather conditons have depleted the brood stock.

MR. CRAMER: Thank you, Dr. Martin, for your very fine paper. Our next speaker is Mr. McEachron, Assistant Director from South Dakota. Mr. McEachron.

MR. MC EACHRON: Thank you, Mr. Chairman. Ladies and gentlemen. As you all probably know, South Dakota has never owned or operated a game farm in its history. Perhaps we have not been smart in that, or maybe we have been exceptionally smart, but that is a point of argument which can be argued anytime or any place.

I would like to refer to the statement made by Harry Ruhl relative to game management or game departments being operated on a business-like basis. Certainly we have got a business to operate, and we must operate it as such, and we can't operate our business on the red side of the ledger, and ever expect to have the backing of the general public. In our state we have had our ups and downs the same as all of you. I think it is a great waste of the public's money to attempt to stock by any means areas which have proven themselves to be inadequate to support game bird life. There is only one way that we can ever increase the area to support that life, and that is

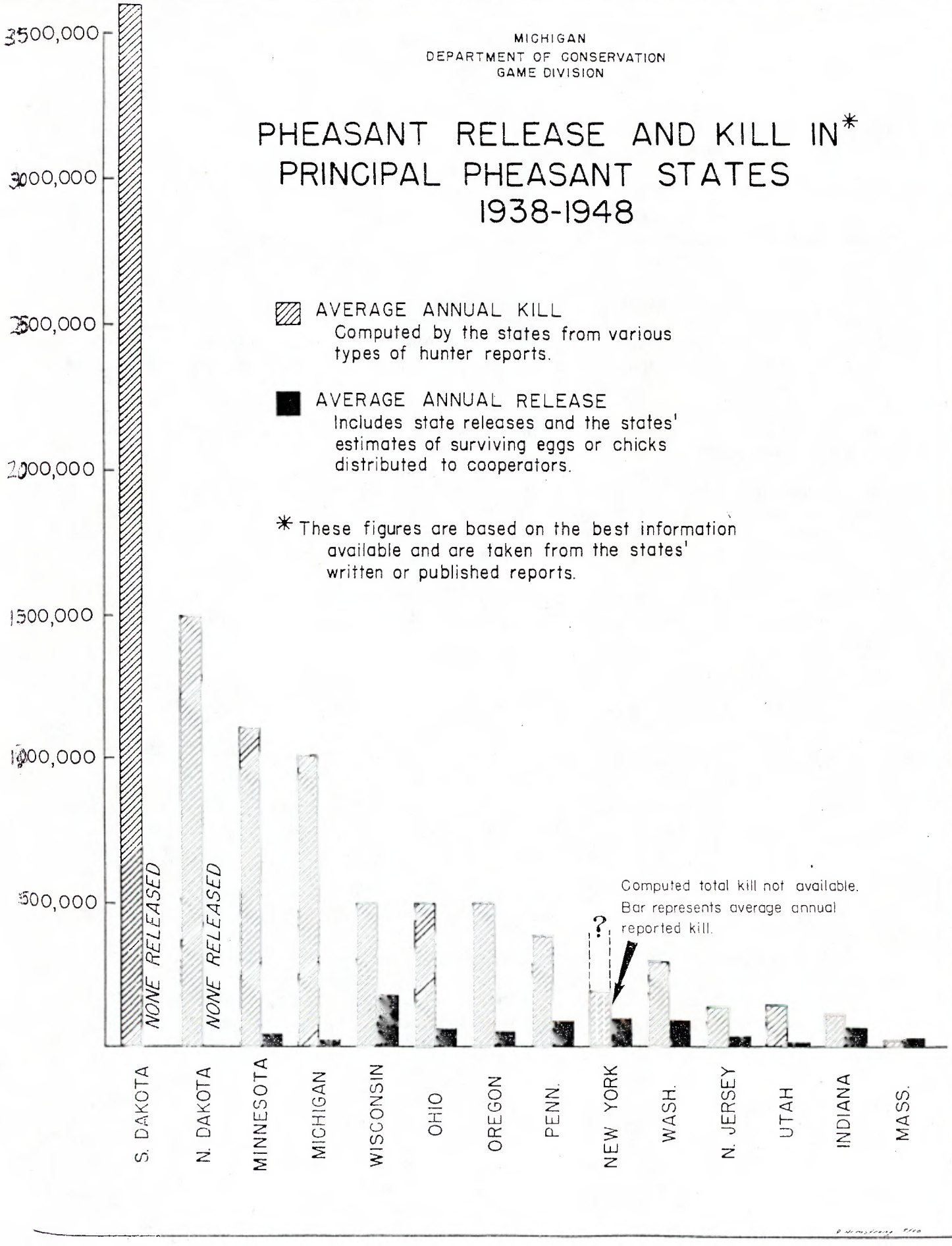
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PHEASANT RELEASE AND KILL IN* PRINCIPAL PHEASANT STATES 1938-1948

AVERAGE ANNUAL KILL
Computed by the states from various types of hunter reports.

AVERAGE ANNUAL RELEASE
Includes state releases and the states' estimates of surviving eggs or chicks distributed to cooperators.

* These figures are based on the best information available and are taken from the states' written or published reports.

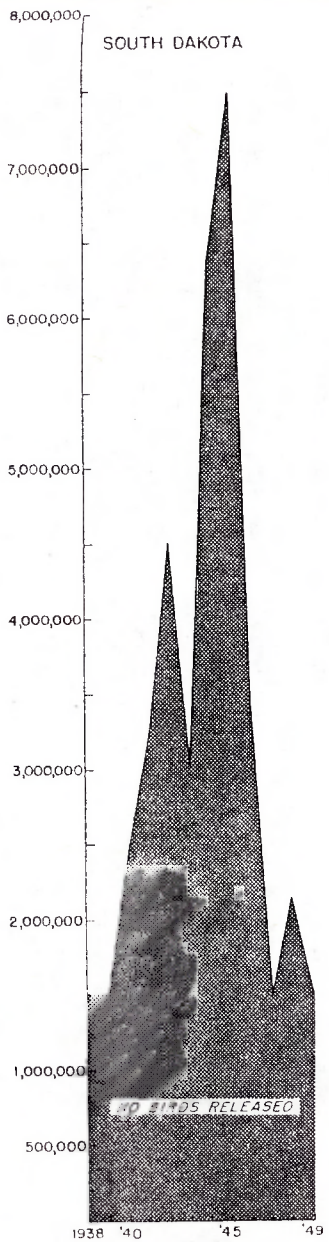


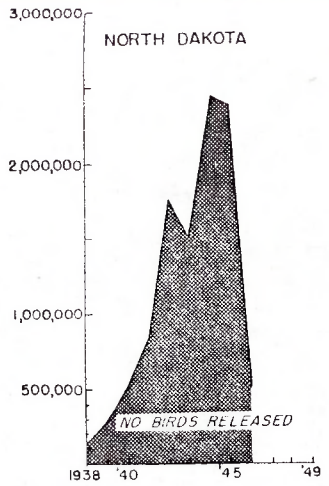
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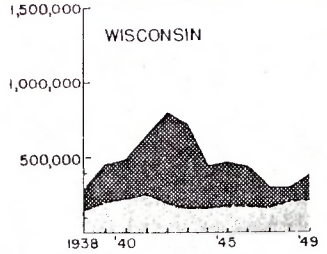
ANNUAL PHEASANT KILL AND RELEASE IN PRINCIPAL PHEASANT STATES 1938–1949

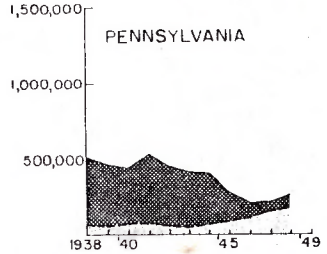
ESTIMATED TOTAL ANNUAL KILL, COMPUTED BY THE STATES FROM VARIOUS TYPES OF HUNTERS REPORTS.

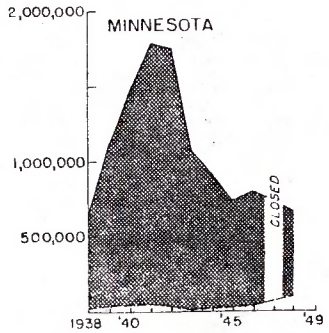
TOTAL ANNUAL RELEASE, INCLUDING BIRDS RELEASED BY THE STATES AND BY COOPERATORS.

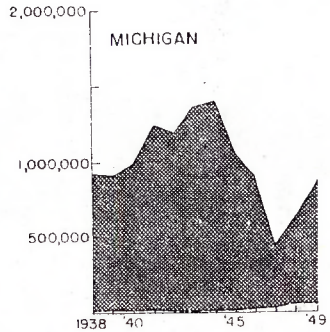


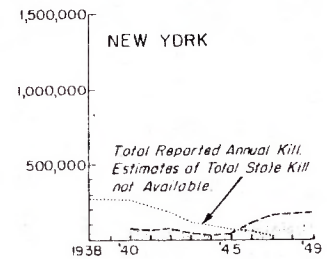


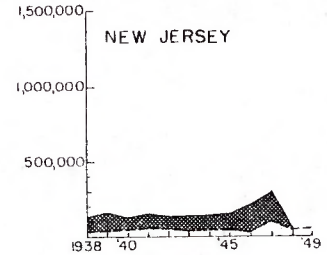


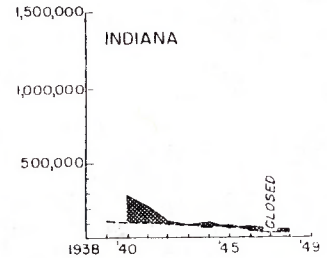


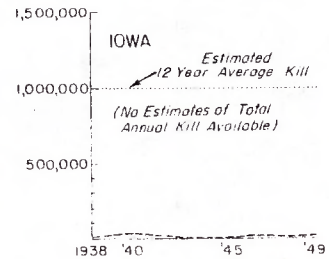


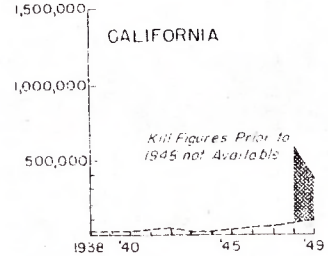


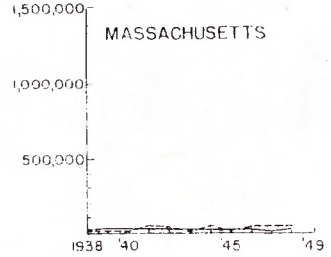












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through habitat improvement. I am a firm believer that habitat improvement in all states where they have pheasants will prove to be much more beneficial than your game farm as far as stocking purposes are concerned. I am not condemning the game farm in any sense of the word. I think your game farm was necessary in all of your states who have them, particularly for your initial stocking of birds. We all would have to have an initial stocking of exotic birds if we were going to introduce them. We purchased ours, but that has been some 30 odd years ago, and since that we have never purchased a pheasant from anyone in any game farm.

Conservatively speaking, I think we would have to say that the least possible figure you could produce an adult bird for any game farm would be a figure of around $2.00. We just use that for an example, and say we hatch two million birds each year. Certainly it would be impossible to sell enough hunting licenses to compensate in any way to take care of that expenditure.

If we should have a catastrophe as Harry spoke about, and certainly every state has those, the only way we could come out ahead would be to restock the initial brood stock so they might start again. We have had those situations, and we have done our restocking, not with game farm birds, but with wild trapped birds. The cost of such trapping averages about $1.04 per bird delivered to his new home. Now, if you compare that with the figure I stated here of $2.00, you will find that you save almost $1.00 per bird, and you have the advantage of wild birds who certainly know the ways of the wild and are able to protect themselves once released again in a new home. While I have no figures to bear me out, perhaps a wild bird is capable of producing more birds, and bringing them through the summer than a bird which has been reared in a game farm. However, I have no proof of that, and would not attempt to establish proof.

We have several peculiarities in South Dakota which many of you do not realize, I think because you refer to us as one of the great pheasant states. I just want to point out one thing to you to show you that all states and all areas are not suitable for certain types of game bird or any other type of game. Just slightly more than half of the state of South Dakota is suitable for the production of pheasants. We have proven, as I stated, that is so by the trial method, and practically every county in the state had pheasants stocked at one time or other, and they have proved to us there is some territory not suitable, and we have discontinued the restocking program.

I think the majority of us will concede that certain types of cover are necessary in an area to produce certain upland game bird hunting. I don't think you can lay down a sound and fast rule of the type of game bird cover that you must have. That varies with the different states and different counties. I am sorry that I don't have the figures to tell you just what it is costing us to produce our habitat covers in the various counties. It has not been entirely worked out on paper at this time, but technicians are working on it from time to time. We have found, however, in our state where we have some very severe winters that we must have a woody cover type, and the area must be about 10 acres in size to be of any great value, and it must be adjacent to some natural food. Now, that area must also have a maximum and a minimum width. We find that many of those areas which were built years ago were built so narrow that they were death traps. We have expanded the width of them greatly now, and have determined just how wide they must be in our state to withstand the winter storms. So, gentlemen, that is where we are spending our money rather than even thinking about game farms, and again let me say that I think that is the answer to your artificial propagation of pheasants in your pheasant areas. They will stock themselves if they are given a chance, and you cannot produce them economically enough in a game farm to run a good sound business such as we have to run in any state. Thank you. (Applause)

MR. CRAMER: Thank you, Mr. McEachron. I am sure your contribution is greatly appreciated. Comes now the state of Wisconsin. Mr. Grimmer.

MR. WILLIAM F. GRIMMER: Mr. Chairman, gentlemen. I think Wisconsin is confronted with a problem that is a little bit unique. I have had a chance to discuss our upland bird problems with Harry Ruhl, and I think we all know that Ohio is pointing toward habitat improvement, and we all know the present situation in the Dakotas, but here in Wisconsin we do have something a little bit different.

We are blessed, as is Michigan, with a fine crop of native upland birds, about six or seven years out of every ten. We are going to enjoy a 50 day season on ruffed grouse this year. We are going to have a sharptailed and prairie chicken season this year, the first in Wisconsin for the last eight years. We have got about 20 counties open to Hungarian partridge, 16 days, and a pheasant season in some fifty odd counties for the same length of time. Eighteen counties will be open on bobwhite quail.

We could easily crop a couple million upland birds this coming year if the hatch is good, and if the hunters have normal success.

On the pheasant we run into a little something different. Now, Wisconsin was tardy in its pheasant stocking program. There were some birds that were produced way back, but generally speaking Wisconsin did not start on its stocking program until about the middle 30's. Most of you have heard of Poynette. It is a rather unusual farm. We are going to have some of you see it before you leave.

This farm at Poynette was established for a specific purpose, and I still think that it serves its purpose, and probably will for a long, long time. It is ironical that about the time the farm was established that Wisconsin began to lose a great deal of its pheasant habitat. Now, I think you all realize that our southern counties are dairy counties. Our university preaches and practices clean farming. No weeds. We have a corn borer here. Fifteen years ago you could see large acreages standing where there was shocked corn. Now it is plowed land after the middle of October. Corn pickers have come into Wisconsin and they pick the cornfields clean. Much of that same country would be classed as good pheasant country fifteen years ago, but pheasant habitat has now been destroyed. We have little pheasant cover when we have a foot of snow on the ground and the thermometer gets down to 20 degrees below zero.

When Poynette was established, I think we had a little bit of foresight in the fact that we weren't as lucky as some of our sister states. We didn't ever think we would compare with them in production, but I think that Harry Ruhl's picture of the state of Michigan is very true. When he talked of cropping millions of pheasant cocks, that is beyond the fondest expectations of Wisconsin until in the very, very far distant future we can get our habitat program to a point where it is comparable with Michigan and, perhaps, Ohio.

We reached our peak pheasant kill in about '42. We started to stock heavily in about '35. In 1932 Wisconsin's pheasant kill was 40,000 birds. You can see how late we were. Many states were cropping a half million or more birds by that time, many of our sister states. We finally reached a peak of 800,000 in '42, and then we went down, and pheasants went down all over the country, and we are building it back slowly. We think that we are building it back for one reason, and that is our stocking program. I think it doubtful we could crop half as many birds as we do without a stocking program.

I am just going to spend a minute on our own game farm. We have a rather unique farm in Wisconsin. I don't think there is anything like it in the world. It was built back in the WPA days when we had something to work with, and it covers about a section of land. We have cooperating with us in that propagation program about 235 clubs, represented by 65,000 active sportsmen, most of which believe that our propagation stocking program is necessary. When I tell you we produce almost 300,000 pheasant chicks at that farm, you can realize the enormous capacity. When I tell you that out of 235 cooperating clubs, active clubs in the southern and western counties, that there was only three dropped out last year, and one of them because they weren't able to hook up their electricity for the brooders because they were not able to get wire, you can see the intense interest in the state. It is not only in pheasant counties, but also counties where they have no pheasant habitat, where these sportsmen are spending their own money, and a lot of their own time, because they want to hunt pheasants. It does not make any difference whether they have a crop of native birds or not. Many of our most enthusiastic counties are grouse counties, and we have a great many in the west and southwest that are producing a great many quail. They still prefer the pheasant, however, and want to spend the money that way, and we are spending it that way. We are still sending out a few eggs, perhaps 30,000 or 40,000 a year, mostly to the 4-H clubs.

We are not kidding ourselves. We are not trying to kid you. You know what number of birds are stocked from 100 eggs that are distributed to the youngsters or the interested farmer, or even the smaller sportsmen's groups, but we think there is a public relations value in that stocking that we can't get any other way, and we feel the same thing with these other sportsmen groups. If they are actually paying a little bit out of their own pocket, and walking down to the pheasant rearing establishment, and seeing and handling these birds, there is a definite value to them and to us besides what they may get that first week-end and during the short seasons which Wisconsin usually has on pheasant.

We don't take the back seat for anyone in the quality we produce at Poynette. We feel that it is even more important that the bird be put out properly at the right time, at the right place, and in the right manner, and it is going to take a long time to improve our technique where we really do a bang-up job. We are gaining ground now, and we have been for the last couple of years.

Now, in addition to the farm program, we have another rather unique program. I refer to Wisconsin's public hunting grounds. Bob Smith down here in the third row, and his men have, during the last five years, leased or purchased probably 80 to 85 per cent of the finest pheasant cover that we have in all southern and western Wisconsin, and this program is based largely on the pheasant. You understand, gentlemen, when our grouse are down, we don't believe in trying to take the last bird. We have a closed season. It is hard to convince the public that when they do come back, that we should open the season when we should. When our grouse did go down on the last fluctuation, we had a three-year closed season on ruffed grouse. We have also had a closed season for eight years on sharptail and prairie chicken. We have had closed season for 37 consecutive years for bobwhite quail before the commission had authority to open the season on upland birds. You can understand what a job we have had to try and interest the people of Wisconsin and the farmers in building the quail back as a game bird.

Our hunting pressure in the south is so tremendous that without the stocking program, I don't think we could even begin to give our people any appreciable amount of hunting in those areas. When the grouse season is closed and the quail are down, when the Hungarians pull into a few counties, as they do, then we have nothing left but pheasants to take the hunting pressure. Old man weather plays such an important part, as he does in any season, and I don't need to tell you about the pheasant turnover in Wisconsin in the last two years. The past two years we have had very dry seasons. Last year we had tremendously high winds. We definitely feel if it wasn't for that stocking program that our kill would have been such that it would be almost insignificant on these public areas where actually, gentlemen, we have 150 hunters per square mile on opening day, and where at times on the opening day it is almost a risk to hunt on these areas.

Now, we think we are going to relieve the pressure somewhat with our grouse hunters but we are looking forward to that time when the grouse is going to go down again, and when pheasants are going to take the brunt again.

I have given you a very brief picture of our propagation and stocking program in Wisconsin, and why we need it. Shortly after the farm was established, within five years, we established a pheasant research program to find out whether we were on the right road. We are trying to handle our business in a practical way. We are not trying to cover up. You have heard that it costs from six to fifteen dollars to stock a mature bird from a game farm. We do it in Wisconsin at considerably under one dollar. We have a system of cost accounting, and our cost accounting man is in the room in case any of you would like to question him on how and why we arrive at these specific figures. We actually produce a fully matured, fully colored, fully feathered bird at less than 80 cents. We buy our feed in train loads, we don't buy it by the ton or carload lots, because when you buy feed for the amount of birds we feed, you have to buy a lot of feed, and the bill just for the growing feed, starting feed is very seldom less than $50,000.00. I give you that figure because there may be some question, and that was the reason we have asked Mr. Mundy from our cost accounting section, to come in and discuss the question with you if any of you are interested.

Now, gentlemen, the final thing is the result of our program. Why does Wisconsin spend a half million dollars in propagation and public hunting grounds? Why do the clubs support this activity unless we get some results? We haven't the natural habitat to produce crops of birds for our hunters. We have to do it the hard way. We are very fortunate in having a research chief who has both feet on the ground, who not only looks at things from the standpoint of research, but who can go out and talk to the hunter in his own language. I think that perhaps we will clinch our argument on the necessity of why Wisconsin stocks, and what results we get from it, by calling in Cy Kabat, our chief of game research, who will talk just a few minutes on the results of this rather large program, perhaps the largest in the country. We anticipate this program will be active for a long time to come.

We realize that the propagation program is not the final answer. We realize fully the almost desperate need for habitat improvement. But we also know it is going to be a long, long time before we gain enough ground in Wisconsin to improve the habitat to a point where we can even begin to think of discontinuing the propagation stocking program in our major pheasant counties. Mr. Kabat.

MR. CYRIL KABAT: I didn't know exactly what Bill Grimmer was going to say, nor what Harry Ruhl or the other people have, so if I repeat a little here, I hope you will bear with me, and I will try to skip anything they mentioned, but because our information is considerably different on the Wisconsin picture as regards the pheasant problem, not only stocking, but other phases, I am going to move through my prepared outline very rapidly in order to get off of the stand and permit some time for questions.

The history was mentioned by practically every speaker up here, but I would like to mention this fact that concerns Wisconsin. The Wisconsin pheasant population began to peak in the years between 1930 and '40's. We had a lot of natural habitat which we may not ever have again with our present means and types of agriculture.

There are three reasons why Wisconsin stocks--and I have these outlines in order to be coherent, and must follow it--but one reason is as Harry Ruhl has explained, to establish populations. This has been successful. Another objective is to sustain populations at highest levels, and those details were discussed by Mr. Grimmer. The economies were discussed as far as cost required to raise a bird.

I will make one comparison of what it costs to raise a bird to shootable size. Miscellaneous values were described. One is gun fodder, at least during the season. Sportsmen's interests were described. The value of game farm stock for experimental purposes is one that wans't mentioned. I will make a remark or two about it.

Now to get to the three objectives of pheasant stocking, and the first objective was to establish population. Harry Ruhl took care of that very excellently.

The second objective is the stocking of artificially propagated birds to sustain populations at maximum size. I will just deal on that for a little bit. The method used to get information on survival of game farm stock is to get band returns. There are two breakdowns of that method. One is to sit down and wait for hunters to send it in, and the other is to get out and personally contact the hunters. The hunters' report cards that have been returned are not of much assistance to the stocking program. We have had from about five to twelve per cent returns on banded birds. We know that returns through voluntary means are relatively low. Personal contact with hunters has resulted in returns of from 20 to 60 per cent on summer releases, and of from 50 to 95 per cent on season releases and preseason releases. There is quite a difference, and although the principle value of pheasant stocking doesn't really change much, because of those results, I do like to bring them in at this point in the program because I think they should be considered when certain programs are being criticized.

Wild versus artificially propagated: We have transplanted pheasants into the same area that we released artificially propagated birds. We have observed them for productivity. We reported this result in our quarterly progress research reports and we were amazed to find out that these wild transplants did absolutely no better than the wild birds, as far as the size of the broods and the number of broods produced. We observed that a minimum number of 30 per cent of the birds that were released had produced. This result was the same for both the wild and game birds that were released in the same area, and in the same year.

Do they produce young? I just said they did, and in that year the average game farm bird released in March produced approximately seven young. The wild stock produced about two-tenths less.

Now, the cost of releasing these birds. They were 10 week old birds. The cost was somewhere between a half dollar and 60 cents. These figures are on summer released birds showing a 50 per cent return. Actually the cost per bird returned to the hunter was somewhere in the vicinity of $1.10; and again I would like to make some comment on what that means. Two years ago at the Midwest Wildlife meeting someone asked the question what it costs to release birds. After a certain report was read, Dr. Cottam, whom you are all familiar with, said "My guess is $16.00 per bird."

Now, the cost of management. Just for a bit of comparison, at this same Midwest Wildlife convention, one of the reports gave the cost of improving habitat. In the first year it cost them $216.00 an acre. They reduced that cost, by getting farmer assistance and other methods of aid, down to $18.00 per acre, which is tremendous, but habitat management is still extremely expensive. Land use itself really controls the size of game populations just as everybody has been talking about it for the last two days, but in the final analysis all we can do, even with best management practices, is to modify to a small extent what the economic status of agriculture in this country will determine our relative game population in most areas will be.

Now, just a few remarks on my feeling towards continuing with a high-geared stocking program. We are not ready for an all out habit program yet. We are trying to learn some methods of getting interests in habitat management development, if you like that term, at an inexpensive level, and not somewhere in the vicinity of $10.00 or $20.00 an acre. We are trying to produce superior birds; and I suppose Dr. Leopold, or Professor Leopold, if he were here, (as I was one of his students), might be shaking his head at this statement, "But with all our modern knowledge, why cannot we do a better job of producing brood stock than nature does". This has been done in other fields and there is documented proof of it. Animal husbandry people, people in the breeding field vastly improved domestic animals. One thing we do want to do is improve our brood stock. The game farm has made definite progress, and these people have been extremely successful in that work, and in decreasing the cost per unit of production.

We have many problems yet confronting us. One of them is to determine why, with 200,000 pheasants released, we don't get larger total returns. Our experimental returns of 60 per cent or better on releases indicates that we should be getting more from our 200,000 releases. That is an important point to consider.

Most of these birds are released by cooperators of which the conservation department releases just a small fraction of the 200,000. We know that this method is inadequate, and the birds they produce are extremely poor at times because of handling and feeding methods, also our experience with them shows that some cooperators do extremely well, others need a lot of work. I don't think we should change our program until we have exhausted every means of getting the cooperators to better their methods of stocking to increase returns.

Take this little example of what happens to poorly stocked birds. About two years ago there was a picture in one of our popular sports magazines showing releases made by representatives of one of these state clubs present at this meeting. It was a picture of a group standing up on a trailer and they were just throwing the birds out into the air. Feathers flew everywhere. Well, a lot of our cooperators do that. We don't. The results are rather conspicuous, and I venture to say that our returns on all birds would be increased at least 50 per cent just by proper stocking, proper handling, releasing and distributing the birds in the right places.

I want to conclude by saying we have no argument with Michigan. Their picture is entirely different. The state of Minnesota does not need to go into a stocking program with the kind of returns they are getting from their natural birds. There are a number of things we want to know before we get completely into habitat development. We have areas where there is good habitat, but no birds. Until we find out some of the answers to such questions, we don't want to drop artificial propagation or decrease its magnitude. We have areas at present that although they have all the natural habitat, we are still trying to study reasons why we don't have birds there. So I don't believe we are ready for the habitat development at this time.

I went through this very rapidly from my outline, and I have tried to cover it pretty thoroughly. I thank you. (Applause)

MR. CRAMER: Thank you, Mr. Kabat, for the benefit of the Wisconsin system. Now, we have about 15 minutes left for discussion from the floor, and I now have the pleasure to introduce Mr. Harkness, who is Chief of the Division of Fish and Wildlife in the Province of Ontario, who will lead the discussion. Mr. Harkness.

MR. W. J. K. HARKNESS: Mr. Chairman, ladies and gentlemen. I first wish to congratulate Mr. Ruhl and his colleagues in the panel discussion on their clear presentation of many aspects in the field of work relating to artificial stocking and its relation to management as being on a sound or unsound basis. As discussion leader it seems to me that what we, as representatives of the various states participating in this conference, are interested in is finding out what the other states and provinces are doing in this connection in a practical way. On that basis I believe experience reports from the representative of each state will constitute the most valuable contribution to the subject. Representatives of some states may have questions arising from a special interest, so that when I request representatives from each state to speak I suggest that they incorporate their questions along with any remarks which they have to make. It was pointed out by the chairman that the time is limited. I shall give you a very few minutes to organize your thoughts of your experiences for making your contributions. It would be a mistake for me to present any philosophical discourse on the subject, so I should now like to hear from Colorado, that state which has such an abundance of all game and find out from Mr. Feast what is going on there.

MR. FEAST: Thank you for the Chamber of Commerce remarks. We do three things in Colorado, as I see it. We don't kill hens. We spend as much money as we can on habitat improvement, and we closed down the bird farms, except that we do raise a limited stock there for depleted areas.

MR. HARKNESS: Minnesota lies between Wisconsin and the Dakotas. That must have a very excellent situation there. I think we should hear from Minnesota.

MR. FRANK BLAIR: This has been most interesting. Mr. Ruhl had a good paper, as had the others. He made the statement that you could not say "yes" or "no" to the question of game farm pheasants.

I was much interested in hearing the gentleman from South Dakota, because if you will look at that map over there you will notice that South Dakota has more pheasants than any other state. He forgot to tell you that Minnesota is right up against them and that in the early days of Minnesota propagation we stocked South Dakota. (Laughter) The reason back of this is that eastern South Dakota, northeastern Nebraska, northwestern Iowa and southwestern Minnesota is probably the best pheasant area in the United States for natural reproduction, and Minnesota birds gradually moved into this area.

The first South Dakota pheasants were purchased from the Wallace Evans Farm, Oak Park, Illinois, a long time ago. We started raising pheasants in Minnesota in 1916. The first birds were released in Hennepin county, then south and west in Carver and McLeod counties. In 1922, or six years later, a banded cock bird was trapped seventy-five miles southwest of McLeod county, which evidently showed that pheasants gradually moved south and west to open country where they were less harrassed and where the corn and alfalfa was to their liking.

We believe artificial propagation does have its place in game restoration work. We think it may be pushed too far, but I personally believe that game farm birds have their place in all around conservation work, the same as all other methods that have been used and none of which have been completely abandoned.

We have planted birds in the wooded areas of southeastern Minnesota but they would not remain there. The hunters get some hunting of such birds, but for good hunting they have to go farther west.

MR. HARKNESS: Thank you, Mr. Blair. Let us look to the area northwest of Minnesota. Mr. Malaher, from Manitoba, can you tell us the conditions up there, please?

MR. MALAHER: Mr. Chairman, gentlemen. I think it is very doubtful that Manitoba has any great portion of good pheasant habitat. We have done a certain amount of work in connection with it, and we have had a few open seasons. We have never taken any real quantity of birds in relation to the number taken in most of your states.

In connection with introduction, we did introduce birds for a number of years from Janesville, Wisconsin. We introduced adult birds. We came to the conclusion that in spite of the excellent Wisconsin stock, we were introducing stock from too far to the south. We reached that conclusion from local reports from the southwestern corner of the province where the pheasants had been released. The reports were to the effect that a number of birds were found with frozen feet. We then moved over to an introduction from British Columbia. Instead of introducing adult birds, we introduced juvenile birds; but here again we have had very little success that we can actually put our finger on.

We have, in all cases, banded these birds, and have had virtually no returns from banded birds and propagated birds.

I think our Manitoba climate is much more severe in the winter than most of these states we have heard from. The drifting snow in Manitoba is extremely dry and loose, and there are many drifts, so there is not much cover in many parts, and the birds don't seem to be able to stand that moving snow.

We have gone into a small experiment in conjunction with the University of Manitoba in trying to raise pheasants, and trying to improve a Manitoba hardy stock. We have also gone into, on a small scale, and I hope we will be able to increase, habitat improvement. We have purchased a parcel of land for habitat improvement and pheasant study.

There is one question I would like to ask, and that is whether the experience in the states here has shown any definite relationship between the cycle of the grouse and the cycle of the pheasant? Thank you, Mr. Chairman.

MR. HARKNESS: Mr. Buhl, can you answer that question from the floor?

MR. RUHL: There is some question as to whether there is a cycle in pheasants similar to the grouse. Because of the incompleteness of the early records and figures on kill we are not able to say. We think there is some indication of a dip which more or less coincided with the fluctuations of grouse, but the question is also confused by the possible effect of the recent introduction of the pheasants. Our best thinking now is that it looks as though the pheasant numbers may follow a cycle as do grouse and sharptail.

MR. HARKNESS: Thank you very much. I am sure we would like to get an opinion from a representative of the sportsmen. I think I will call on Mr. Woerpel of the Wisconsin Federation. Mr. Woerpel.

MR. WOERPEL: Mr. Chairman, gentlemen. I didn't come down here to get up in front of you and talk. I came down to see how much I could learn myself. This pheasant proposition, to us, is getting to be almost as controversial as the deer question. In fact, it might even develop into that before too long. I would like to cite a few of the problems that we have found from our study in the state, and believe me, it has been incomplete.

We have 62 counties in Wisconsin in which we release pheasants. In 31 of these counties we release (both through chicks distributed to clubs and mature birds planted by the department or distributed to clubs for release) more birds than we harvested. In one or two counties we released almost three times as many birds as we harvested, and in several counties (10), twice as many as our records show we harvest.

In one county we release 1400 mature birds and 400 chicks and harvest 15,732. In a neighboring county 10,350 birds are released and 22,378 are harvested. In the first case over 7 times as many birds are harvested as are released. In the second case only a little more than twice as many are harvested as are released. That is in our better pheasant habitat.

In another area just 300 chicks and 300 mature birds are distributed for release and around 5,200 birds are harvested. In a county bordering this one on the west we distribute around 5,600 birds and harvest approximately 3,600. In a county to the east 9,150 birds are released and approximately 3,600 birds are harvested. In a county to the southeast only 400 chicks and 600 mature birds are distributed and approximately 3,600 birds are harvested.

Now, here we have a section where apparently the habitat is equal in several counties. We are getting approximately the same amount of kill off of each of these counties regardless of how many birds we are putting into them.

Now, some of the questions that are raised by these few figures I have mentioned are these: If we have a glass in one hand, and a pitcher of water in the other, and are trying to put all of the water from the pitcher into the glass, it won't hold it. If in neighboring counties with similar habitat we harvest as many birds in one county with less planting effort as we do in the rest with heavier plantings why continue the heavier planting? Doesn't it appear that we are trying to put all of the water from a pitcher into one small glass?

How much are we willing to charge off for one bird brought to the hunter's bag on a $1.50 license? I would like to say that in respect to the cost of the pheasant released in the field, I don't think the sportsmen are particularly interested in the cost of the birds released from the game farm. I think what the sportsmen are more interested in is how much each bird that is brought to bag is costing, and not what each bird released in the field is costing the sportsmen.

I have heard figures--I may be wrong on them--that our pheasant program is costing us $325,000.00 a year. If that is the case, and we released 200,000 birds, that would figure out to me to be $1.63 a bird. The return, of course, you can figure yourself, is all the way from 50 per cent survival on up, and that will come close to double the cost for each bird brought to bag. So in those cases where we are overstocking some counties, we are spending a considerable amount of money on individual birds brought to bag, and it is possible that we are cheating some of the other sportsmen of some of their rightful license money, which should be spent on other programs for their benefit.

Our winter turnover is apparently high, and if this is correct, is it because our habitat offers little or no protection when the birds need it most?

What happens to natural reproduction in the middle of the road counties? Are we eliminating it by creating a condition which requires too close competition between the birds?

Is it economical to continue to stock to shoot, which we are apparently doing in at least half of our pheasant counties, or should we invest in habitat with the hope that the investment can be retired, at least in some of the areas that now require recurring investments?

I would like to say before I go any further, that these are questions that have just come up recently. We have got a great program in the state of Wisconsin, and we are behind the department 100 per cent. We have no quarrel with them whatever. These are questions that were raised in our own Federation, and we are hoping that the Federation will continue their studies, and that the Congress will appoint a pheasant study committee to work out these problems with the department to find out what the answers are.

We don't know that our figures or our interpretations are right here, probably we have gone off the beam slightly, but we are satisfied that something is wrong and we want to work with Mr. Kabat and Mr. Grimmer on the solution of these problems, and we think that is the only way to find a happy ending as we did on the deer question. Thank you. (Applause)

MR. HARKNESS: Thank you, Mr. Woerpel.

Unfortunately, gentlemen, our time has run out, and there is other business that has to be dealt with, but I think we should compliment our chairman for having put such a timely subject on the program, and I think we might suggest to whoever is in charge of the program next year that they put something of the same nature on again. Thank you very much.

PRESIDENT SWIFT: Thank you for your very fine discussion, gentlemen. I think that answers the questions on the pheasant situation.

Now, we will have to go on to the next matter on the program.

I just want to make one statement before you leave, and that is that the cost of pheasant propagation in the state of Wisconsin is not $325,000.00; it is about two hundred.

Now, we will come to the business meeting.

BUSINESS MEETING-JULY 26, 1950 (11:08 A.M.)
(President Swift Presiding)
President Swift called for the Secretary-Treasurer's Report
REPORT of the Secretary-Treasurer
17th Annual Meeting - July 26, 1950
MILWAUKEE

Mr. President and Delegates:

Your secretary-treasurer attempted to carry on his part of the business of the Association as efficiently as possible this past year, assisting the President in planning the program of this meeting and in handling routine matters. One step toward building up the organization's prestige was the preparation of letterhead stationery. Another long needed action was the writing of a brief history of the Association to show its background and reason for being. All states and provinces were sent copies of the proceedings of the first two annual meetings for reference use. The Proceedings of the 16th Annual Meeting at Lincoln, Nebraska last year were sent out by past-secretary Lloyd Vance. He has a few extra copies available free for those who contact him for them.

Your treasurer received $433.50 from Lloyd Vance of Nebraska, the previous treasurer. To this has been added $100.00 for payment of the 1949 dues of South Dakota and the 1950 dues of Missouri, Minnesota, Wisconsin North Dakota, Colorado, South Dakota, Iowa, Illinois and Kansas for total receipts of $533.50. Statements were sent out on June 10 and $10.00 checks for 1950 dues must still come in from Indiana, Manitoba, Michigan, Nebraska, Ohio and Ontario. To date only $19.95 has been expended for 2,000 printed letterheads, leaving $513.55 in Association assets as of today.

The Association has engaged a local Stenotype Reporting Company to produce the verbatum transcript of this meeting and it is our hope the cost for this service will not exceed $150.00. We expect the record of this meeting will be distributed to you within a month or two. It is the treasurer's recommendation that he be permitted to close his books after the six states and provinces have paid their dues and after any anticipated outstanding bills have been paid. The remaining funds and records will then be sent on to the new secretary-treasurer. Delegates from states still owing dues should check on this matter when they return home to be sure the vouchers are in the process of being executed.

It has been a pleasure and an honor to serve the Association as secretary-treasurer this past year.

Respectfully submitted,

/s/ Walter E. Scott
Walter E. Scott
Secretary-Treasurer

It was moved by Mr. McEachron and seconded by Mr. Bode that the report of the Secretary-Treasurer be accepted.

President Swift called for the Auditing Committee's Report

AUDITING COMMITTEE REPORT

Your Auditing Committee have examined the books, accounts, and bank statements presented by the Secretary-Treasurer for the current year, up to July 26, 1950, and have found them to be a true and correct statement of the finances of the Association of Midwest Fish and Game Commissioners for the period specified.

Your Committee recommend that before handing over the books to the new treasurer, the present incumbent of that office should conclude the business arising out of this meeting.

G. W. Malaher
Chairman, Auditing Committee

Moved by Mr. Malaher, seconded by Mr. Morgan that the report of the Auditing Committee be accepted. Carried unanimously.

Mr. Feast urged better attendance at the national and international meetings, contending that the International is a very important body in the affairs of the nation as far as national wildlife management legislation is concerned. Mr. Bode concurred in Mr. Feast's statements, and President Swift stated he would like to reiterate what each said about the International. President Swift called for the report of the resolutions committee.

REPORT OF RESOLUTIONS COMMITTEE

Mr. Leonard Schwartz, Chairman, of the Resolutions Committee first expressed appreciation for the help and assistance of the members of the Resolutions Committee, namely, Messrs. Hoffmaster, Wilson, Gilbert, Sprecher, and to Mr. Scott, Secretary, of the Association. He then presented the following resolutions:

Resolution No. 1 - presented by the Auditing Committee and recommended unanimously by the Resolutions Committee.

WHEREAS, in past years reports of meetings of the Association have been the responsibility of the host state; and

WHEREAS, the facilities of the member states or provinces are limited to the extent that publication of these reports is often tardy and sometimes entirely omitted; and

WHEREAS, it is of value to each member that a copy of the proceedings be received as promptly as possible; and

WHEREAS, the cost of taking and transcribing records amounts to more than the aggregate annual membership dues; and

WHEREAS, it is felt to be the responsibility of the Association that these records be kept, and not that of the host state or province;

NOW, THEREFORE, BE IT RESOLVED, by the Association of Midwest Fish and Game Commissioners in convention assembled this 26th day of July, 1950, that consideration be given at the next annual meeting to an amendment to the constitution permitting the increase of membership dues to $20 annually and that notice to this effect be mailed to all members, in accordance with the constitution.

Mr. Schwartz stated the Resolutions Committee moves the adoption of the resolution.

The motion was seconded by and carried unanimously.

(Before the vote was taken, Mr. Bode suggested that publication of the proceedings of this meeting be taken out of the treasury. Mr. Wilson said that could be done by motion. (See page 153 for final action on this suggestion.)

Resolution No. 2

WHEREAS, there is urgent need for expansion of the law enforcement forces of the U. S. Fish and Wildlife Service in order to provide more effective enforcement of the migratory bird laws and regulations in areas where state enforcement provisions are inadequate; and

WHEREAS, the state game and fish or conservation agencies in such areas would generally welcome the expansion of such enforcement work by the U. S. Fish and Wildlife Service; and

WHEREAS, when the bill to increase the duck stamp fee to $2.00 was pending in Congress in 1949 there was widespread approval thereof among the conservation and sportsmen's organizations of the country on the assumption that the provision incorporate therein, authorizing the use of not over 25% of the monies received annually from the sale of duck stamps for administrative purposes, including law enforcement, would be passed as part of said bill; and

WHEREAS, said bill was amended in Congress before passage so as to reduce the allowance for administration, including law enforcement, to 10%, and there is now a widespread demand among the sportsmen and conservationists of the country for increase of said allowance to 25%;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Game Commissioners in convention assembled this 26th day of July, 1950, go on record that we urge Congress to amend the duck stamp law so as to increase the percentage of funds that may be used for administrative purposes, including law enforcement, to not to exceed 25%.

Mr. Schwartz stated the Resolutions Committee moves the adoption of this resolution.

The motion was seconded by Mr. Sprecher, and carried unanimously.

Resolution No. 3

WHEREAS, there is urgent need for carrying on wildlife conservation work in the National forests in order to protect and maintain the valuable wildlife resources thereof for the public benefit; and

WHEREAS, the carrying on of such work by the U. S. Forest Service has been severely curtailed in recent years through lack of funds, to the detriment of the wildlife resources of the forest areas; and

WHEREAS, the charging of special fees for hunting or fishing privileges in the national forests is impracticable on a national scale and would be expensive to administer and difficult to enforce;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Game Commissioners in convention assembled this 26th day of July, 1950, go on record that we urge Congress to appropriate annually to the U. S. Forest Service such funds to carry on an adequate program of wildlife conservation work in the forest areas in cooperation with conservation agencies of the respective states in which the forests are located; and

BE IT FURTHER RESOLVED, that we urge the conservation agencies of the respective states to give greater consideration to wildlife conservation activities within the national forests.

Mr. Schwartz stated the Resolutions Committee moves the adoption of this resolution.

The motion was seconded by Mr. Blair, and carried unanimously.

Resolution No. 4

WHEREAS, the Pittman-Robertson Act has developed throughout the several states a progressive and very essential program of wildlife research and development; and

WHEREAS, the projects established under said program have become the most important factor in the operation of the various game, fish and conservation departments; and

WHEREAS, it is both desired and essential that such programs be placed on a uniform and continuing basis for the purposes of proper planning and budgeting; and

WHEREAS, there now exists an unappropriated surplus of $13,000,000 in the Pittman-Robertson funds;

NOW, THEREFORE, BE IT RESOLVED, by the Association of Midwest Fish and Game Commissioners in convention assembled this 26th day of July, 1950, that we urge Congress to enact legislation providing that as long as there are any monies remaining of the unappropriated sums credited to the "Federal aid to wildlife restoration fund" prior to July 1, 1947, there shall hereafter be annually appropriated those amounts which, when added to the appropriations for carrying out the provisions of the act of September 2, 1937, as amended (16 U.S.C. 669-669j), for the fiscal year beginning July 1, 1951, and each fiscal year thereafter, make a total annual appropriation of $10,000,000 for such purposes.

Mr. Schwartz stated the Resolutions Committee moves the adoption of this resolution.

The motion was seconded by Mr. Bode and carried unanimously.

Resolution No. 5

WHEREAS, the great number of hunting casualties throughout the United States is becoming of serious public concern; and

WHEREAS, most of the states are being confronted with demands for the passage of various types of legislation to control said hunting casualties; and

WHEREAS, it is our belief that any such legislation should be based upon facts and should be designed for the best possible application and control; and

WHEREAS, the National Rifle Association has developed a uniform hunting casualty report form;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Game Commissioners in convention assembled this 26th day of July, 1950, go on record as adopting the form as presented by the National Rifle Association and urging each state to cooperate in filling out said form on all hunting casualties occurring in the future, and transmitting a copy thereof to the National Rifle Association;

BE IT FURTHER RESOLVED, that we urge the National Rifle Association to reciprocate in cooperation by furnishing the several states with an annual report and analysis of hunting casualties to the end that all efforts directed toward the control of casualties can be made on a sound and uniform basis.

Mr. Schwartz stated the Resolutions Committee moves the adoption of this resolution.

Mr. Harkness felt the members should see the form first. After discussion, the motion was seconded by , and carried unanimously.

Resolution No. 6

WHEREAS, there is overwhelming support of the sportsmen and conservationists of the country for the Dingell Fisheries Aid bill, which has been passed by the House of Representatives and is now awaiting action in the Senate;

NOW, THEREFORE, BE IT RESOLVED, by the Association of Midwest Fish and Game Commissioners in convention assembled this 26th day of July, 1950, that we urge the United States Senate to pass said bill as speedily as possible, and upon such passage, we urge the President of the United States to approve the same;

BE IT FURTHER RESOLVED, that the Secretary of the Association of Midwest Fish and Game Commissioners be instructed to wire the President, and interested United States Senators, advising them of the contents of this resolution.

Mr. Schwartz stated the Resolutions Committee moves the adoption of this resolution.

The motion was seconded by Mr. Blair, and carried unanimously.

Resolution No. 7

WHEREAS, extensive drainage of farm land, stimulated by federal aid furnished through the Soil Conservation Service and the Production and Marketing Administration under the Department of Agriculture, has done widespread and irreparable damage to the habitat for waterfowl and other wildlife;

THEREFORE, BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in convention assembled at Milwaukee, Wisconsin this 26th day of July, 1950, as follows:

(1) We recognize the right of farmers to improve their land by drainage, but we remind them that wildlife has great value to farmers and to the public, that the protection and development of wildlife habitat benefits farms and enhances their value, and we urge them to make full allowance for this in connection with their drainage projects.

(2) We believe that under present economic conditions the promotion of land drainage by federal aid, especially the payment of cash subsidies, is unnecessary and unsound, although we recognize that certain types of drainage are necessary for good farming and that some drainage is beneficial to wildlife. We, therefore, urge Congress and the Secretary of Agriculture to stop the payment of cash subsidies for drainage, to extend assistance to farmers for drainage only to such extent as may be necessary for good soil conservation and land management, with due consideration for wildlife values, and to take all steps that may be necessary to co-ordinate and direct the activities of the Soil Conservation Service and the Production and Marketing Administration to the ends above-stated. If payment of cash subsidies for drainage is continued to any extent, we recommend immediate adoption of a rule that such payments will be made only for projects approved and supervised by the Soil Conservation Service, with due consideration for wildlife and other natural resources.

Mr. Schwartz stated the Resolutions Committee recommends adoption of this resolution.

The motion was duly seconded by Commissioner Wilson, and carried unanimously.

Resolution 8

WHEREAS, there is urgent need for the co-ordination of federal activities pertaining to water development and for the reorganization of the agencies concerned therewith in order to eliminate confusion and conflict between present agencies, prevent waste of public funds, promote efficiency in operations, and insure adequate consideration for wildlife and other natural resources and public interests in water development projects; and

WHEREAS, there is now pending in Congress an effective measure to accomplish the objectives above-stated, H.R. 8663, whereby the functions of the Secretary of the Army and the Corps of Engineers relating to flood control, river and harbor improvement, and electric power production are transferred to the Secretary of the Interior, and a Board of Analysis for Public Works Projects is created; and

WHEREAS, this bill is substantially in accord with the recommendations of the Hoover Commission and its Task Force on Natural Resources; and

WHEREAS, the adoption of this bill will result in immediate and far-reaching benefits to the public service, and will not interfere with later consideration or adoption of other recommendations of the Hoover Commission or its task forces, while delay will result in postponement of the aforesaid benefits and in continued confusion, waste, and mismanagement of public interests of great magnitude;

THEREFORE, BE IT RESOLVED, by the Association of Midwest Fish and Game Commissioners in convention assembled this 26th day of July, 1950, that we urge Congress to pass H.R. 8663 without delay.

Mr. Schwartz stated the Resolutions Committee recommends adoption of the resolution.

The motion was seconded by Commissioner Wilson.

Mr. Sprecher amended the motion that the resolution be amended to require that the Board be appointed with the consent of the Senate.

The motion was seconded by

The only affirmative vote was by Mr. Sprecher, all others negative, or did not vote. The amendment to the motion was lost and the resolution was adopted with only Wisconsin voting in the negative.

Resolution No. 9

WHEREAS, H. A. Rider has resigned as Chief of the Division of Wildlife of the Ohio Department of Natural Resources and has thereby severed his official connection with conservation affairs, after a career of distinguished public service which gained him recognition as an outstanding conservation leader;

THEREFORE, BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in convention assembled at Milwaukee, Wisconsin, this 26th day of July, 1950, that we regret Mr. Rider's retirement from active conservation service, that we urge him to continue his interest in conservation affairs, that we invite him to maintain his connection with this Association, and we wish him all success in his future undertakings.

Mr. Schwartz stated the Resolutions Committee recommends adoption of the resolution.

The motion was seconded by Mr. Wilson, and carried unanimously.

Resolution No. 10

WHEREAS, all good things must come to a reluctant end and so, too, must the 17th Annual Meeting of this Association of Midwest Fish and Game Commissioners, this 26th day of July in the friendly city of Milwaukee, Wisconsin; and

WHEREAS, Association President, Ernest Swift, and Association Secretary, Walter E. Scott, and all of the Wisconsin Conservation Department personnel and the Milwaukee County Conservation Alliance, for accomplishing a Herculean task of more than fulfilling their duties of their respective assignments from the planning and presentation of the very stimulating program with the most presentable exigencies of the entertainment which can only make Milwaukee famous; and

WHEREAS, this convention has been a great success in all departments;

BE IT THEREFORE RESOLVED by the Association of Midwest Fish and Game Commissioners in convention assembled at Milwaukee, Wisconsin, this 26th day of July, 1950, that this resolution be considered a declaration of our sincere appreciation and gratitude for the efficient direction of this convention and the most gracious hospitalities extended the delegates and their wives.

Mr. Schwartz stated the Resolutions Committee unanimously recommends the adoption of this resolution and a rising vote of thanks.

Mr. Bode seconded the motion, and it was carried unanimously and those present rose.

* * * * * *

President Swift stated that in view of the fact that Elmer Peterson could not be present, he had asked Dr. Harkness to act as Chairman of the Nominating Committee and moved that the secretary should cast a unanimous ballot for them:

President - Dave Leahy - Kansas
Secretary-Treasurer - Harry Lutz - Kansas
Vice-President - Bruce F. Stiles - Iowa
Directors: C. N. Feast - Colorado
Leonard Schwartz - Illinois
H. P. Cottingham - Indiana
G. W. Malaher - Manitoba
P. J. Hoffmaster - Michigan
Chester S. Wilson - Minnesota
I. T. Bode - Missouri
Paul T. Gilbert - Nebraska
H. R. Morgan - North Dakota
Charles Dambach - Ohio
W. J. K. Harkness - Ontario
N. E. McEachron - South Dakota
Ernest Swift - Wisconsin

Mr. McEachron moved that his name be stricken and that in its place the name of Elmer Peterson, Director, be included for South Dakota.

The motion was seconded by Mr. Feast. When put to a vote, the motion was lost.

Mr. Bode then seconded the motion of Dr. Harkness for the Nominating Committee. The motion was carried.

President Swift then passed the official badge of office on to Mr. Leahy as the incoming President, wishing him the best of luck in behalf of the Association of Midwest Fish and Game Commissioners.

Mr. Leahy accepted the badge and stated there would be a large turn-out at Kansas next year.

* * * * * * *

Mr. Bode moved that in connection with Resolution No. 1 Wisconsin be reimbursed for the cost in preparation of this meeting's proceedings. The motion was seconded by Mr. Wilson, and carried unanimously.

Mr. Scott, Secretary-Treasurer, then reported that 194 people registered for the meeting, and 153 were at the banquet. He stated this has been the best attendance so far although the goal had been set for 200.

Photographs were then taken of the new officers.

The meeting adjourned at 12:05 P.M.

(Ed. Note: The 1951 meeting will be held in Kansas--possibly Wichita)

APPENDIX

I. CONSERVATION EDUCATION IN THE PUBLIC SCHOOLS

P. J. HOFFMASTER
Director, Michigan Department of Conservation

In dealing with resources we must not forget that very largely they are

in private ownership, or if publicly owned, as with game and fish, they are tied in closely with private rights on land. Finally, then, the job of soil and water conservation on the land is one of the landowner. Most of the reforestation done in the nation was done by government, state and national, but the biggest job is on privately-owned land. The bulk of our game--birds and animals--is raised on land and water owned or controlled by private individuals and corporations.

So long as this condition exists we must look to the millions of landowners to handle the resources in a manner that will not be wasteful and to encourage their renewal where they are of that type. The problem is with people more than with resources, and in dealing with people we must know that not much will be accomplished without an incentive of some kind.

Then comes the question as to type of incentive that is most effective. We all know of those that are in vogue now, and I am sure new types will be "invented" as conditions become more and less critical. There is one, however, that should not vary. It goes beyond the pale of incentive--it is a duty. With the right to own natural resources goes the duty to use them in a judicious manner--which I presume gets us into the duties of a citizen.

What to do to develop proper concepts of citizenship is not eaily determined, and to keep these concepts verile and flexible enough to cope with changes in conditions is just as difficult. But I believe that if our people--young and old--could know more about the land there would be a marked enhancement of their respect and appreciation of these things. And is this not a prerequisite of their appreciation of the right, freedom, and protection stemming from citizenship? A thing, and the right to protect it, individually or collectively, go together. Who will strive to get a thing without the right to protect it? The incentive to preserve a right, when that right has lost its meaning and isn't worth protecting, is even less--only the immortals will respond, and with them there is no problem.

For years, we whose business is to enforce or promote conservation laws and principles, have seen the need of a much greater understanding of nature on the part of people--adult and youth alike. Long since we have learned that hunters and fishermen cannot be coerced into complying with law, or into excercising ordinary woods and waters manners, by and through policemen, alone, regardless of the officers' efficiency and adroitness. We think it is demonstrable that law abidance and the niceties of sportsmanship must come from within. The motivating force that will cause people to use rubbish containers, rather than to throw rubbish wherever they happen to be, lies not in the park managers and their aides. It must be a part of the park user.

A group of boys in a camp were sloppy and reckless. One Sunday morning after a hot Saturday they were asked to help clean up a beach and picnic grounds. There were quantities of rubbish and they didn't finish the job, but their campgrounds were much cleaner thereafter. I cannot explain why people, many of whom are adults, will throw on the ground, beaches, and floors of park buildings, upwards of 5,000 tons of rubbish a year. The parks belong to them. At home, rubbish is burned or hauled away. I firmly believe that if the offenders could go through the experience the boys in camp did, the tonnage would be cut down materially.

Three summers ago a camp was occupied by some 700 boys--100 at a time--who were given no special instructions. It was somewhat of an experiment. At the end of the camping season the damages were computed and found to be in excess of $500, although there was no major destruction of property. (It must be pointed out, however, that the percentage of vandals in this group was considerably higher than average.) The next summer the camp was occupied by average boys who were given some out-of-the ordinary instruction.

They were made responsible for breakages of the unusualy type and at the end of the season the damages consisted largely of windowpanes, door hinges, etc., aggregating less than $25 for the camp.

I cannot believe camping was made obnoxious and distasteful to the boys of the second group. Rather, I think they developed a fuller appreciation of it and I am sure that they have a more wholesome attitude concerning property that belongs to the people and that was put there for their use.

It is not an uncommon thing for people to think and say that the conservation of our natural resources is a job for conservation departments, law enforcement and regulatory agencies, and for them alone. The number who have this attitude is getting less, but much too slowly. Sometimes I think the check on waste is in proportion to the enhancement of our thinking on this: Then, again, I am in doubt. This, however, must be borne in mind: Our greatest progress has been made on the more glaring and conspicuous forms of waste. Forest fires, stinking waters, deep gullies, excessive slaughter of birds and animals--all of these things stand out "like a steer on Fifth Avenue". That they are undesirable, destructive, and downright wrong, is self-evident and needs no proof. Once they are so identified, remedial measures are or can be brought into play with comparative ease.

The greater difficulty lies with the less conspicuous forms of waste. Water that is reasonably clear and that doesn't stink, yet is neither fit to drink, swim in, nor clean enough for fishes, is really difficult to clean up. Soil depreciation because of sheet erosion (when a little topsoil is washed off the slopes and clear across the landscape with each big rain) is appreciated only by the experts and by a comparatively few farmers. To lick it is a long-haul job and it requires straight thinking and the effort of more than just a handful of public officials. The job is big and expensive and it can be done only when a lot of people believe it can and must be done.

Those of you who have been around camps have seen the foundations of buildings literally undermined by water and wind erosion. The same thing is going on to a greater or lesser degree on all land not covered with plants of some sort. But children neither see nor know it unless it is called to their attention. Can a more important lesson be taught to the oncoming generation? And is there an easier, more effective way to call it to their attention than to take them to the place where it is happening.

The importance of arresting this "number one" menace to the land can be made more realistic and impressive by a few simple experiments or demonstrations on the land within walking distance of the camp. Plant trees and shrubs in the gullies and they soon grass over. On the top of a slope where the topsoil is pretty much removed (and such slopes are not hard to find) plant some corn. At the same time, in May, plant another strip halfway down the slope, and at the bottom, where the soil keeps piling up, plant an equal area. In the fall, let the children check the results.

Whether they start at the bottom and work up or go from the top down is unimportant but it is important that they get the comparison. From the good soil in the hollow will come big stalks and full ears that can be compared with the stalks and nubbins on the side of the hill and the immature stalks with few or no ears on the top of the slope.

The lesson is there, it has been told, they will not forget it (we hope), and from then on they will appreciate what gullying and the removal of topsoil really mean. If they are told that pork chops and ham are high or low in price, depending on our corn crop (barring support price programs), the lesson is still more meaningful to them.

Water management, except for floods, is another phase of conservation that is difficult to deal with largely because its course is not easily followed by the layman. In connection with this--in fact, with all nature--is a principle we nearly all know but seldom recall--it is the ever-changing nature of things. Nature, herself, is never static. Land, water, plants, birds, animals, and their relationships, each to the other, are different each day. To man, the changes, in most instances, are slow--hardly perceptible from day to day--and because of this apparent slowness unusual methods of teaching (establishing concepts and understanding) must be employed--else we perish prematurely.

The recent experience of New York City is an awful price to pay for a lesson in water management. Can a repetition be averted if more people know about water and what happens to it from the time it reaches the earth? More and more we will be confronted with acute water problems. With an ever-increasing demand it cannot be otherwise--unless we foresee the trends and then do something about them in advance of the emergencies.

We have been a prodigiously wasteful people with all of the resources of our land. We have taken and used them with no thought of the future and not much regard for the waste entailed. Even today we are cutting the forests faster than they are being replaced. Wildlife, with all our efforts, is losing ground. The tide of soil depletion has not yet been turned. Underground water tables are being lowered at an alarming rate in certain sections. The whole picture is dark--and unnecessarily so. To be sure, there are many reasons, but to me there is just one--not knowing. It would be heresy to say that the experts and scientists don't know, because they do. But "knowing" is not enough. There must be nation-wide awareness of these things and of their significance. And I am not talking about government policy, resource boards, and planning commissions. These I have seen; they help largely as guideposts and in the supplying of leadership. The big push must come from the 150 million people of our nation, and, if they know and appreciate these things, the push will come.

I believe the most important policy government could establish with respect to resources would be one of acquainting the citizenry with the true significance of our natural resources; then, forthwith and without wavering, to do something to assure their preservation.

Outdoor education through the schools is as yet too new to bring material benefits to our resources. Even the methods of teaching are in the experimental stage. I wonder, sometimes, whether--if children were just taken where the things of nature are, out beyond the influence of great centers of population, and were given a limited amount of guidance and interpretation--it might not be the best and most effective way of getting into their minds a truer concept and fuller appreciation of the things we live by.

But teaching is not my specialty. Willing or otherwise, I must leave that to the schools; but when we see them build outdoor education (education by taking these children out to where the things are) into the curriculum, we can have renewed hope. Until then, conservation is likely to be an over-worked term with a half-hollow meaning. Technology has pretty well worked out ways and means but their application is slow--too slow.

II. SUMMARY ON THE OLD-TIMER'S BANQUET OF JULY 25, 1950
by Walter E. Scott

The speakers table of old-timers and honored guests at this banquet centered on Director I. T. Bode of Missouri who was acting as toastmaster. He was flanked on either side by C. F. Culler, Oscar H. Johnson, Ray C. Steele, H. W. MacKenzie (previous Director for Wisconsin), E. V. Willard and Ernest Swift. Ernest Swift read a letter from Senator Karl E. Mundt, (N.D.) an old-timer who was unable to be present, and a telegram from General Ralph M. Immell (Wisconsin) explained his absence.

Toastmaster Bode opened the program with special honors to the Canadian delegates present, to Albert M. Day, Dr. Charles Dambach, "the baby of the organization" and to Harrell Mosbaugh for his fine efforts on River Basin work. Special recognition was given to the nonpaid commissioners present including E. J. Kohler (S.D.), E. G. Trost (Chairman, Iowa), E. B. Gaunitz (Iowa), Joseph P. Rahilly (Chairman, Michigan), George A. Griffith (Michigan) Lawrence J. Gotschall (Michigan), Peter J. Calcatera (Michigan), Arthur Molstad (Chairman, Wisconsin), Douglas Hunt (Wisconsin) and Dr. J. A. Riegel (Wisconsin).

Bode reviewed some of the history of the "Midwest Association" and paid tribute to good work done by the old-timers when the "going was much tougher". He cited developments in waterfowl regulations, the fight over G-20A, duck stamps, cooperative research units, the American Fish and Game Policy and advances in research and management. Reminiscenses were detailed by H. W. MacKenzie, Oscar Johnson (See his prepared statement following this summary.) Bode cited the history of the Association prepared by Walter Scott this year and E. V. Willard. Special honors were paid to old-timers C. F. Culler and Ray C. Steele and to Ernest Swift for his work in the organization in past years--even though he was not one of the founders.

The program closed with a tribute by Ernest Swift for I. T. Bode who, as Director from Iowa, was the first Secretary-Treasurer of the Association in 1934, the banquet program in the Circus Room of the Wisconsin Hotel, was successful in its purpose of recalling the past and encouraging close harmony and cooperation as these fifteen states and provinces move forward together in the future.

III. REMINISCENSES by Oscar H. Johnson at Banquet

Progress is not necessarily the complete abandonment of something old for something new; it is the holding onto the best of each era and using it as the cornerstone of the new. A succession of such steps constitutes that irreplaceable factor we call "experience". The American people traditionally take great pride in progress and advancement of any kind, and none of us would have it otherwise. We are the same time both a practical and a sentimental race, who cherish and support great symphony orchestras to give us the world's finest music played with technical perfection yet who, generation after generation, recall and take great delight in the hillbilly music of an old-time fiddler. After all, the melody is the thing, the thread that holds together the music of all the ages, the one common factor which we have held onto throughout the changing tastes of musical Americana. So it is in the evolution of other phases of our development as a nation; we need not throw into discard the whole of any era, but rather we need to retain and utilize the good in it.

Wildlife conservation as practiced today certainly is a far cry from the unorganized and unscientific view which prevailed in the early days. Game management today is big business, recognized and operated as such. By almost any standard, our progress has justified itself. But I confess to slight misgivings at times. In this, as in any other business, there is the production end--and the selling end. The "know-how" of our specialists is beyond serious question; they have made well-defined gains in their fight to preserve species and produce game. In the "selling" end of the business, however,--in the creation and maintenance of good working relations with our "customers" (the sportsmen and conservationists, which may be but are not necessarily the same) I wonder if in the rush of our atomic age we aren't losing some of the "common touch" which identified the old-time conservationist so closely with the people among whom he worked. I would urge a revaluation of this philosophy--a trend away from the theory that a choice must necessarily be made between working FOR the people or AGAINST them. After all, there is the happy alternative of working WITH them. This is one of the early day precepts that I consider worth cherishing and studying--and possibly making greater application to our 1950 conservation efforts.

Another legacy from pioneering conservationists is that of courage and devotion. It has been only in the past quarter of a century that the scientific approach to the management of wildlife has been accepted. In the transition period, when the pattern was beginning to swing toward the realization that the hit-or-miss system of other times was not good enough in the face of so-called civilization, then, as in most crises, the success of the new era depended on a few men of vision and action. Their knowledge had to be equalled by their courage. It was not enough that they saw the compelling need for a more constructive approach. It was their job, in the face of indifference and ridicule to "sell" the new concept of conservation without which the results we see today--and hope for tomorrow--could never be. There were, of course, several such men, but I could not mention a more shining example than the late Aldo Leopold.

One other quality which tempered their outlook and shaped the thinking of our early leaders is moderation. In many phases of our national life the trend has been away from extremes, toward a middle-of-the-road course. There was a time, not many generations ago, when there were two main classes of society: the prince and the pauper. Now, with democratic America leading the way, the trend is toward a great middle class, encompassing by far the majority of the world's population. But in the wildlife field we still suffer from extremes. We have a few highly-trained technicians who would consider wildlife management as a perpetual experiment, never advancing beyond the test-tube stage. The other extremists recognize only the immediate tangible benefits; he is the man who advocates stocking of fish and game with no regard for the adequacy of habitat and food. All that he is interested in is quick results, with no thought of the future. Somewhere in between there is the middle course which, by drawing from each doctrine in moderation, provides the answer to practical game management. We need desperately to reach that middle course, and the tolerance and open thinking of our past leaders might help to point the way.

We have organizations like DUCKS UNLIMITED who spend great sums and achieve proportionate results in the production of birds not (except incidentally) for the sake of the species or of wildlife conservation as such; their motivating philosophy is more targets for the hunter's gun. At the other end of the pole are our AUDUBON and other 'nature' societies, whose principal reason for existance is the perpetuation of the species, mainly for the sake of perpetuation, with, of course, incidental aesthetic enjoyment by men. Surely there is a middle course between these schools of thought where a fair compromise might be reached; where no species would find itself in danger either of starvation due to over-population, or of extermination by over-shooting; where living requirements could be met in such a way that practical management would be accepted, and a shootable surplus

a happy reality. No one could or would deny the camera fan or other nature lover his enjoyment of wildlife, and everyone should share his apprehension at the threat of extinction of any species. Yet--Man was given dominance over the birds and animals of the field, and at least under present conditions is morally and financially responsible for them, so he has every right to claim the surplus as a harvestable crop. A little broader outlook on the part of each party would go far toward narrowing the gap between these extreme doctrines.

The path to the practical and tangible results we all hope for often leads through intangible and ageless truths, no less than through the near-magic of technological processes, and for these reasons I would humbly suggest to the new generation a rededication to the basic philosophies which guided those men who paved the way for them. I wonder if this might not prove to be that important drop of oil so necessary to the smoother working of our modern scientific machine?

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