ASSOCIATION OF

Midwest Fish and Game

COMMISSIONERS

PROCEEDINGS

Twenty-Second Annual Meeting

STANLEY HOTEL - ESTES PARK, COLORADO

July 18-20, 1955

The Twenty-Second Annual Meeting of the Association of Midwest Fish and Game Commissioners was called to order at 10:00 a. m. on. July 18, 1955, in the Stanley Hotel, Estes Park, Colorado, President Thomas L. Kimball, presiding.

MR. KIMBALL: I want to take this opportunity to welcome you to Colorado. I think it is fitting that we have the Midwest Association meeting here since most of your constituents from back home seem to be in Colorado at the same time. I would like to make a few announcements. . .

Originally we had hoped to have Governor Edwin C. Johnson welcome you to Colorado in the proper style, but previous commitments prevented his attendance this morning, and Lt. Governor Stephen L. R. McNichols generously agreed to attend. However, I suspect he has been held up by the Camp Carson mule pack train coming up from Denver. So you will have to take my word for it that you are welcome to Colorado. We enjoy having you and hope you will have a good time.

The Midwest meeting has always been an informal meeting, composed largely of game, fish and conservation departments, where we get together to discuss the problems we have and tend to come to some sort of agreement on how to solve some of them. We want to continue that same informality during this year's convention. You will notice from the program that it is the discussion type, and we want all of you to participate freely in the discussions.

Following the procedure which was established a few years ago, the Midwest Resolutions Committee presents the resolutions to be recommended to the member states. We feel that an adequate discussion of all these resolutions is proper and in order before action is taken on them to give you time to think about them. The usual procedure is to have the business meeting during which the Resolutions Committee reads the resolutions and everyone has an opportunity to vote on them. In this case, I think since resolutions are almost always somewhat complicated a discussion of them before voting on them is important. This morning's program covers the resolutions which will be presented, and we want all of you to participate. I will turn the mike over to Bruce Stiles, Director from Iowa, who is the Chairman of the Resolutions Committee. I would like to thank him and the other members of the Committee for preparing the report for this morning.

MR. STILES: Mr. President and members of the Association: I used to know a man who wrote quite often in the Saturday Evening Post in the Post Scripts section by the name of Arthur Kipling. I don't know what has happened to him-- I haven't seen his poems for quite a number of years. But his poems dealt with animals and were a take-off on human nature. One dealt with the convention of bears of the Nation. It was rather long, and I don't remember just how it went, but the last part was, as the convention was breaking up:

And they ambled off in bevies down the boulder-bordered run
Assured that what was voted for was just as good as done.

I think probably as we have an impact on the conservation of the Midwest and the Nation that as much of it comes through the resolutions we adopt as anything else if we will do something about them. Lots of people, of course, consider that only one of the necessary evils of carrying on a meeting, and often it is just that we do, either officially or unofficially, represent several million sportsmen here in the Midwest. Many of our resolutions deal with legislation, and if all the states who are represented here -- all of the directors and some of the other people -- if you will make your wishes known to your Congressmen, I am sure that the impact of

this group can be quite important, as it has in the past. I think we can all point to many pieces of desirable legislation that primarily came about through the interest of this Association and the International.

Last night the members of the Resolutions Committee - Mr. Bode, Mr. Morgan, Mr. Ruhl and Mr. Voigt - met and we mulled over a number of things we thought we would present and we decided at this time we would bring up these various points which we might adopt as resolutions and you can discuss them. We will want to discuss them here on the floor. This will give you a chance to mull the thing over; then, depending on your sentiments on them, we proposed to meet this noon and write them up to be presented formally. Of course, that will not prevent any resolutions being considered which you may want to present. In fact, we intend to meet at luncheon. If any of you have resolutions not presented by the Resolutions Committee here for your consideration, be sure to hand them to me or some of the other members of the Committee or bring them up to Room 312. I don't know how you will want to handle these -- I have 8 or 10 -- whether you will want to discuss each one after I have made comments on them --

MR. KIMBALL: Let's take them one by one and discuss them.

MR. STILES: I think probably the one uppermost in the minds of most of us is the surplus of $13,467,000 in P.R. It has been a very controversial thing. The 83d Congress, I believe, considered at least five or six bills that dealt with the distribution of this fund. There were two schools of thought, and unfortunately quite a division of opinion on this.(1) The Young-Price-Dingell type bill, which proposed to allocate this money to the states in equal portions over a 5-year period and would not require matching money. At the Executive Committee meeting of the International, the International went on record approving that type of legislation. That was, however, opposed by the Bureau of the Budget, I understand, and also the Fish and Wildlife Service, who preferred the Metcalf type of bill, which, in effect, provided that money be appropriated and be substituted for next year's appropriation so we had one-year backlog. Of course, if at some future date something should happen to P.R., we would have another year to go on. Many people thought you were getting nothing extra out of it, and I believe the Western and some of the other Associations preferred the Young-Price-Dingell type of legislation and so went on record. It is my understanding that we have a bill in Congress now more or less of a compromise, and in May of this year there was a hearing held by the Subcommittee on Merchant Marine and Fisheries, a committee of the House, and the bill was thoroughly discussed. Representative Fred Boykin, Chairman of the Committee, on the second day of the hearing introduced a bill known as H. R. 6502. A companion bill was introduced in the Senate by Allen Bible, S. B. 756, and this proposed to appropriate that $13,000,000 and allocate it back to the states over a 5-year period, but it would require the states to put up matching money. One of the other arguments in favor of the Metcalf type was that it included management in the work that could be done with this money. This bill also includes management. There is one limitation I don't care too much about -- it limits the use of funds for management to 30 per cent of the amount of money that is appropriated, and that is something I am sure we want to take action on. I really see no great objection to ear-marking 30 per cent - as time goes on and we need more that can be changed, I am sure. It seems this compromise is proposed and if we get behind and push it we can get that $13,000,000 jarred loose. Harry, do you have anything you want to say on that?

MR. RUHL (Game Division, Conservation Department, Michigan): I think the management does not include the restoration figure that is now in Federal Aid. It wouldn't be a serious problem.

MR. STILES: I would say, for the average state there would be something like $300,000 divided over a 5-year period and the matching money would not amount to more than $12,000 or $15,000 for the average state.

MR. KIMBALL: There is one point in connection with the new bill. I read the bill and I don't recall any limitation percentage-wise on the management features. Director Farley, can you give us any information, or any of the other directors here recall if there is any limitation on it?

MR. FARLEY (Director, U. S. Fish and Wildlife Service): My rather hazy recollection was that it was included at 30 per cent. We have no strong feeling on that, and might I say that the Fish and Wildlife Service would welcome a strong resolution on the general program as a compromise -- it would be most helpful. Please don't misunderstand me -- this is not something we are promoting. You understand that?

MR. STILES: It is included, I am sure.

MR. KIMBALL: O. K. I stand corrected.

MR. STILES: Carl (Shoemaker) got out a letter about July 9 and enclosed a copy of the bill.

MR. KIMBALL: As I understand it, Boykin and Bible in the Senate have introduced identical bills. There have been hearings held, and I think if all states favor that legislation and would, as Director Farley suggested, pass strong resolutions endorsing that particular measure, there is a chance of getting that passed this session of Congress since the hearings have already been held. I know the Western endorsed it, and I am sure the International Executive Committee went along with this compromise bill. I think if we get behind it, it will add one more touch to getting the job done this year.

MR. STILES: According to the letter I got from Shoemaker, he felt that, inasmuch as Boykin, the Chairman of the Committee, had taken the time out from the hearing to introduce the bill, and will push it, there is a good chance of getting it through.

MR. SPRECHER (Assistant Director, Conservation Department, Wisconsin): About that 30 per cent per year -- would that be cumulative if you couldn't take advantage because of budget limitations? Could you start it in 1957 and use it for three years?

MR. STILES: That was one of the features of the original bill - the Price-Young-Dingell bill. This is Boykin's bill.

MR. KIMBALL: It is the same as the original Pittman-Robertson Act. It would be available for two years. If you couldn't pick it up the first year you could get it later.

MR. STILES: I do have a copy of the bill. Would the members like me to read it?

(Here Mr. Stiles read the bill)

Now I think probably the next item of importance was the proposal that was made in the 83d Congress that we earmark 40 per cent of the Duck Stamp Fund for use in providing refuges, feeding grounds, nesting grounds, and, I believe, purchase all types of wetlands. Is that correct, Mr. Farley? It was quite broad. Now the Director of the Budget and the Fish and Wildlife Service both reported unfavorably

on this type of bill, and I can see the position of the Fish and Wildlife Service in that. I don't like to have my funds earmarked either. But, from a purely selfish point of view in this instance, I would like to see something earmarked for that purpose. On July 30, Mr. Farley presented a statement to the Subcommittee on Public Lands of the House Committee of Interior and Insular Affairs, recommending that 7,500 acres of land be purchased for waterfowl purposes. Up to the present time, there are about 3,500,000 acres used for that purpose. Mr. Farley recommended a program whereby they should acquire about four million acres over a 25-year period. It was estimated the cost of this would be $40 an acre, or $160,000,000. He estimated the development to be $20 an acre, or $180,000,000, making a grand total of $240,000,000. If that program is carried out, it means we will have to get $9,600,000 a year for the next 25 years. Under our present $2 duck stamp, it provides about $4,500,000 a year, and it is estimated that within a period of time that should level off to about $6,000,000 a year and you know that some of that -- at least 15 per cent of the total -- is earmarked and will be used for enforcement and administration, and a much larger sum for refuge development. In any event, it doesn't seem to me that that is going to be much more than a drop in the bucket. There has been a little sentiment to raise the price of the duck stamp. I have heard $5 mentioned. There is resistence to that. There is the other alternative that Congress should appropriate adequate funds to carry out this refuge program, which, I think, we all feel would be the most logical and desirable thing, and I think no one disputes the fact that something should be done to increase that program, and it will be our job here to decide whether we should support such a bill earmarking 40 per cent of the duck stamp money or whether we should support a bill which would be amended to increase the price of the duck stamp or whether we should take some action endeavoring to get Congress to make direct appropriations for it. I think we should probably take some action on that at this meeting. Does anyone have any comments? There have been several bills introduced on this in the 84th Congress. Senator Bible has introduced S. 757, Moss, H. R. 447, Young, H. R. 597, and Engel H. R. 37, and those have been introduced in this session of the 84th Congress, so unless some action is taken they probably will die in committee unless someone is interested. Do you have any comments on that?

MR. KIMBALL: I would like to hear from one of the other directors.

MR. FARLEY: Mr. Chairman, by way of correction. Earlier you mentioned the acquisition of additional lands in terms of thousands -- I think that is millions of acres.

MR. STILES: 7,500,000, I believe is your statement that you made and the program was to acquire 4,000,000 a year for 25 years.

MR. FARLEY: I may have misunderstood. Again, in the interests of accuracy, the Fish and Wildlife Service does not report on these bills. The Department of the Interior reports. There are occasions -- not singling out this one -- when the final report, all things considered, might not be the report of the Fish and Wildlife Service. I think it should be understood that that is the system under which we operate. Also, there is an apparent inconsistency of not wanting 40 per cent set aside for the purchase of lands and then, on the other hand, saying we do not need the millions of acres. We do need the acres. I think that is apparent. This other problem arises if Congress or some other source of funds does not provide additional money. Your Fish and Wildlife Service has the practical problem of administering its existing acreage. If we should get no more money and have to administer our present refuges on our present income for that purpose, we would not

only have to stop buying land but we would also have to retrench on development and administration of refuges. We are not opposing primarily the setting aside of 40 or any other per cent, but setting aside when we have no other way of providing for the development and management of the system of refuges.

MR. STILES: I can see that point very clearly, and I think each state has a similar problem. Quite so, it is going to take funds from something we consider essential. Do you feel, Mr. Farley, that earmarking of the 40 per cent, besides curtailing your management of what you have, that it would be wholly inadequate -- it would provide earmarking 40 per cent or some $2,000,000 a year when you need $9,500,000?

MR. FARLEY: That is correct.

MR. KIMBALL: Director Farley, I don't want to put you on the spot or make statements that might be misconstrued as not being in favor of getting more wetlands, but I think the Federal Congress is somewhat like our state legislatures. If they appropriate funds to acquire land for a purpose they appropriate the necessary funds to manage and develop those areas. I think it would be inconsistent to say, if Congress earmarks 40 per cent of those funds for land acquisition they would do so without knowing they would have to provide additional funds, maybe from the General Treasury, to develop and maintain those refuges. I think, viewing the Fish and Wildlife Service budget in past years, the tendency first of all is away from land acquisition by the Federal Government at any time under the new policy. This is bad, in my opinion, particularly as far as wetlands are concerned, because there is more of a tendency on the part of Congress, in view of this trend, not to acquire land but to utilize duck stamp money for purposes of administration and the other functions of the Fish and Wildlife Service. That is the thing I don't like. I think we should very seriously consider in this meeting an adoption of a resolution which would earmark 40 per cent of the duck stamp money for land acquisition. At least a resolution of this type would inform Congress that in this specific instance we want more lands acquired with the duck stamp money and require Congress to appropriate to the Fish and Wildlife Service the necessary funds to take care of their routine operation and maintenance. I think that is a function of Congress to provide that money. All of you have read the Congressional records and dissertations by the congressmen on the duck stamp money, and I think Congress's general feeling is that money should be spent for the acquisition of land and not for housekeeping functions within the Fish and Wildlife Service. I think, should all the states present a united front on some type of resolution embracing the two points that we want more wetlands bought and for Congress to appropriate the funds to maintain them that it would be wise.

MR. STILES: At the meeting of the International at Seattle, that was fully recognized, and the International did not feel they were yet in a position to go on record endorsing that measure, and they did adopt a resolution asking the President of the International to appoint a committee to make a study of that.

Before I left home, I wired John Biggs at Washington, who is Chairman of the Executive Committee of the International, and asked him if that committee had made a report and if they had to send it to me here. It is possible we will have that report for consideration this afternoon.

MR. TROST (Commissioner, Iowa Conservation Commission): It would seem to me that, in addition to perhaps earmarking 40 per cent for land acquisition, we might well ask for direct federal appropriations. It seems to me that the Nation and

certain parts of the Nation are getting some benefits from water and the more wetlands we have -- I am not a water engineer, but it seems to me as a public benefit the more wetlands we have the more we are going to see our water tables replenished, and it seemed to me it is a wonderful opportunity to kill two birds with one stone -- provide marshes and, at the same time, more reservoirs that recharge our water table, and I think we would be justified in asking for direct Federal appropriations in addition to the Pittman-Robertson funds. I can't see but what the whole Nation would benefit.

MR. STILES: I think that is probably right, and, as I recall it, Mr. Farley in his report stated the present amount of wetlands under the jurisdiction of the Fish and Wildlife Service was wholly inadequate.

MR. FARLEY: That is correct. I understand one of the reasons I am here is to be put on the spot, and I am perfectly willing to be put on the spot because I think you are entitled to our thinking. I have suggested on two or three occasions that perhaps this same thing could be accomplished if there could be a joint resolution by Congress that the duck stamp money was intended for a specific purpose, and either urging or recommending or probably directing that large portions of it be used for a purchase program might accomplish the same thing as the 40 per cent. It's just a thought I threw out.

MR. VOIGT (Director, Wisconsin Conservation Department): I heartily concur in the views of Mr. Kimball and Mr. Trost. It appears to me that, inasmuch as the duck stamp money isn't sufficient for the type program we contemplated anyway, to make that the cornerstone of the resolutions -- We would be far better off to hang our hat on a specific appropriation program since the other funds aren't sufficient anyway for the type of program we need.

MR. STILES: Would you suggest having that in the form of larger appropriations to the Service or appropriations specifically earmarked for that purpose?

MR. VOIGT: I think from my experience with our own legislature that where appropriations are appropriated for specific purposes you have a better chance of having the enactment of such appropriation.

MR. STILES: Possibly we have covered that as fully as we have time here.

MR. KIMBALL: Ladies and Gentlemen, the Lt. Governor of the State of Colorado has arrived, and I am sure he can welcome you to Colorado much better than I have done. So, without further ado, I want to introduce to you Stephen L. R. McNichols, Lt. Governor of Colorado.

MR. McNICHOLS: Thank you, Commissioner Kimball and members of the Midwest Commissioners and members of the Midwest Commissioners annual convention. I think that perhaps our Governor, who has been a great conservationist for many years, could possibly have given you a much better welcome than I. As you know, our present Governor was twice Governor of this State, once Lt. Governor, and 18 years in the United States Senate, and now again our Governor. I think perhaps he has done more for fish, game and wildlife activities than any other man in this State. I have had six years experience in the Legislature. I was elected to one term and served two years of my second term, and have had some association with the fish and game problems of this State. I don't think I am too familiar with the interstate problems, but I am familiar with the legislative reactions to fish and game problems. I think sometimes legislators are a little hesitant and shortsighted in not seeing

values of fish, game and wildlife programs, especially these western states that are tourist-minded states and that's the second industry in this State. This is every man's program. Everyone can buy a license and everyone benefits. It's a little man's program. He gets as much and possibly more than those in higher financial brackets. I think we should strive to keep the Legislature from getting their hands on fish and game funds. We have a good deal of controversy in this State about ear-marking funds. I think some funds should be earmarked. I think our Highway funds should be. I think our wildlife and fish and game funds should be earmarked because it's the people who buy the licenses that pay for the program. When legislatures unwittingly try to appropriate these funds, they generally mess up the program. I have been a great believer in keeping the Legislature's hands off these funds. Every hunter and fisherman is an "expert" in this field. I know the problem when you have thousands of "experts" trying to do your job. Be that as it may, I think over the years in Colorado and the western states we have had a progressive program that should be kept intact and carefully watched and fostered and nurtured in every way. I don't know how I could give you a better welcome to Colorado than to have you come to Estes Park and Grand Lake. On behalf of the Governor, we welcome you here and hope you will find it convenient to make this your headquarters as often as you like. If there is any way we can help you, you just have to say the word and we will be on the job. I thank you very much.

MR. STILES: The next item that I think we should take under consideration is the so-called Baker Bill. There were at least six identical bills to the Baker Bill introduced in the 83d Congress. As you recall, this proposed to set aside and earmark 10 per cent of the National Forest receipts, but not to exceed $5,500,000, to be used for recreational facilities and wildlife habitat improvements. In the present Congress, Anderson has introduced S. 73, and I believe that is now before the Senate Committee on Agriculture and Forests, and there are also some House variations before the House Committee on Agriculture. This has been opposed by the Bureau of the Budget. However, it was endorsed by the U. S. Forest Service. According to information I got from Carl Shoemaker as of about the first of July, this bill is going to have a hard time in Congress. I don't believe there has been any difference of opinion among conservationists or sportsmen -- they have unanimously endorsed it. Even though it may not get through the 84th Congress, I think it worth while for us to endorse legislation of this kind. Is there any comment on the Baker Bill?

MR. RUHL: I would like to make one comment. People say they object to the earmarking feature -- that it's better to make the appropriation direct. I notice here the Forest Service appropriation for management of wildlife resources is $210,000, which I believe is about $3,750 for each forest. There is no evidence that they are going to increase or give an adequate appropriation for those activities because there are 56,000,000 acres or more of land. That is a small amount.

MR. STILES: I think, under the jurisdiction of the Forest Service, there are about 180,000,000 acres. Are there any further comments on that?

The next that we had in mind was our present law dealing with the establishment of mining claims. I am sure you are all familiar with the abuses of this particular act. When Cleland Van Rester appeared before the 17th North American Wildlife Conference he said about a million acres of land formerly owned by the United States and administered by the United States had found its way into private ownership by the flagrant misuse of laws governing the discovery and operation of mines. Only about 14 per cent of these claims have been taken to patent and proved up on, and an overwhelming majority of this million acres of land was obtained without a serious intention of mining. It is being used for hot dog stands, beer parlors,

hunting lodges, etc. He also stated that on these lands that had been staked out there are about 7,000,000,000 board feet of timber, and the value of that timber was about $57,000,000. On these mining claims, as I understand it, all you have to do is discover any mineral, including sand, gravel, pumace, pumacide, cinders, etc. You can go and stake out your claim. You can either take your claim to patent or there is no limit to the length of time you can hold without taking it to patent. The majority of people who go in and build hunting lodges and so on, fail to take it to patent because if they do they have to pay taxes on it. The first of this month, a compromise of the bills that were introduced in the 83d Congress -- None got to first base -- I understand a compromise bill, H. R. 5891 by Congressman Walter Rogers, passed the House, and a similar measure, S. 1713, is in the Senate and has been reported favorably by the Insular Affairs Committee. The Congress -- the first session -- takes their vacation the first of August, and, according to Shoemaker, there probably will be no action on this until they get back, but there seems to be a good chance of getting that passed in the 84th Congress. This is of interest to all of us, but particularly to the western states. Is there any comment on this bill?

MR. RUHL: Isn't there another bill recently introduced which would be quite contrary to Engel's?

MR. STILES: Yes, H. R. 100 by Clarion of California. That deals with the same thing. There are about 180,000,000 acres of public lands under the jurisdiction of the Forest Service and about 179,000,000 acres of public domain lands under the Bureau of Land Management in the United States. It is my understanding there is an enormous amount of land in Alaska -- about 254,000,000 acres of public lands there. When this original mining law of 1872 was set up they excluded a narrow strip along our streams for the purpose of power development. You could not go in there and stake a claim without the approval of the department having jurisdiction over the land. If you found valuable minerals you could make application to the Forest Service or the Bureau of Land Management and stake out a claim. There was about 7,000,000 acres excluding an area which was a very narrow strip along our streams, which protected our trout streams from being despoiled by mining operations or taken over by squatters. He has now introduced H. R. 100, which would throw a small amount - 2 per cent - of the Federally held lands in the United States. It would throw it back under the terms of the original mining law. Certainly I think it is a very vicious bill and if we can do anything to prevent its passage we should do it.

MR. KIMBALL: Maybe we could incorporate that in the endorsement of Senator Anderson's bill. Is there any objection on anybody's part to opposing that bill and endorsing Anderson's?

MR. STILES: The next is the enforcement of state game and fish laws on military reservations. Such a bill has been proposed in the past several sessions of Congress, but it has never reached the hearing stage. Senator Willis A. Robertson introduced one of these bills, I think, in the 82d Congress and the 83d Congress, and it is my understanding that Senator Robertson is willing to introduce such a bill again if he feels that the sportsmen will get behind it and if anything can be done about it. It was suggested that it might be worth while to adopt a resolution commending Senator Robertson for his action, and asking that he re-introduce such a bill. What is your thinking on it? Mr. Farley, has the Fish and Wildlife Service carried on some hearings with the Army Engineers in an effort to iron them out, or am I wrong?

MR. FARLEY: I was making notes and didn't hear the discussion.

MR. KIMBALL: Hunting on military reservations and requiring them to abide by state laws.

MR. STILES: You did hold some hearings with the S. C. S. and the Army Engineers on the Coordination Act. Was this included in the hearings?

MR. FARLEY: It wasn't included in those discussions, and I am not familiar with any other development in this area. I would recommend such a program, I assure you.

MR. RUHL: I think the Western included not only the military but other federal agencies. I suppose there might be exceptions.

MR. KIMBALL: That is correct, Harry. The Western Association passed a resolution that state game and fish laws apply to all federally owned and controlled lands where hunting and fishing is permitted. We recognize there are federal game refuges and atomic energy plants where perhaps there would not be any hunting or fishing permitted, but we wanted to include the over-all aspect of Federally owned or controlled lands where hunting and fishing might be permitted in order to have once and for all this question settled that the fish and game belong to the states and should be under their jurisdiction for regulation. I have in mind there the old attempts some years ago, let us say, for the Forest Service to take over fish and game management and administration on national forests and so on, so that was one of the laws taking care once and for all of the application of game and fish laws on all private, federal and state lands.

MR. STILES: If you have any further thoughts on that, if you will contact the Resolutions Committee I shall be glad to have you. Another thing that is extremely important is the Coordination Act, I believe enacted in 1934 and amended in 1946. The Corps of Engineers now contends that Public Law 732 is not applicable to any projects that were authorized previous to 1946. You are all aware of the fact that many projects throughout the United States were authorized -- in fact, I believe in 1929 there were an enormous number of projects authorized although no engineering was done or no appropriations were made. I think the Fish and Wildlife Service has had some of the hearings with the Corps of Engineers and the S. C. S. which have been very beneficial. No progress was made in the 83d Congress, but a bill has been introduced by Senator McClelland of Arkansas, who is Chairman of the very powerful Rivers and Harbors Committee. This bill irons out the difficulties and does make this applicable on all projects regardless of what agency they have been undertaken by to manage any of our streams, and under the terms of the proposed bill the Fish and Wildlife Service is authorized to make a study and bring back a report and this will be an integral part of the report to go back to Congress and will be applicable regardless of when authorized except those projects for which money has been appropriated on projects already under way. There seems to be a very good chance of getting this passed, and I am sure it would be well for us to do everything we can to get that through and adopt a resolution dealing with Public Law 732.

MR. McBROOM (Fish and Wildlife Service - Coordinator, Office of River Basin Studies): Mr. President, there is no question but what Senator McClelland's bill will remedy the main deficiency in the Coordination Act we have known in the last few years. That is, it would make all the provisions of the act applicable to the very great number of projects which have been authorized for construction not only by the Corps of Engineers but for which funds have not been appropriated. We are

hopeful that this bill passes, and, as a result of the hearings we have had with the Corps of Engineers in that area, we will be able to make that hold from the fish and wildlife conservation standpoint. There is some question, I might say, that this new bill, which revises Section 2 of the Coordination Act, will make it applicable to projects which are under local sponsorship and where Federal agencies only provide technical and financial assistance. That has been another problem of ours. It's a question -- I don't offer the answer.

MR. KIMBALL: Is it strong enough to get them to do something about it?

MR. McBROOM: The present Coordination Act provides that the report of the Fish and Wildlife Service and cooperating state agencies will be a part of the report submitted to Congress. Senator McClelland's bill provides the same thing, but the problem there has been our report has sometimes been an appendix not printed but lost in the volume and not recognized in the recommendations of the reporting officers. I hope we have at least partially solved that situation with our agreement with the Corps of Engineers by providing that our recommendations and those of the state fish and game departments be brought out of the appendix and into the records so that they will be a built-in part.

MR. KIMBALL: That's not required by law now?

MR. McBROOM: Senator McClelland's bill simply requires that these reports be made an integral report. As I pointed out, these are sometimes lost in the appendix, but the agreement, if it is lived up to -- and we have no reason to believe it will not be -- will pull those recommendations up into the report of the reporting officer.

MR. FARLEY: Plus the fact that if the Engineer disapproves he has to state his reason. In other words, the argument has to appear in the document for everyone to see.

MR. STILES: Which I think is important.

MR. JAMES KIMBALL (Director, Minnesota Conservation Department): I just wondered if anyone has other suggestions, particularly covering their work with the S.C.S., the Department of Agriculture or the watershed program. There is going to be a lot of that. I wonder if Public Law 732 covers that activity adquately.

MR. STILES: It does cover any project undertaken by any agency of the United States Government that is dealing with waters or any project undertaken by a private agency that is wholly or partially financed by federal funds. Is that correct?

MR. McBROOM: I think I will have to disagree with it. It applies to projects that were undertaken pursuant to Federal permit. It is an area where lawyers are not agreed as to whether it applies for a locally sponsored project where the Federal project affords financial and technical assistance.

MR. KIMBALL: Should that be strengthened to say that any are required to have a Federal Power Commission approval?

MR. McBROOM: Any that get financial or technical assistance.

MR. KIMBALL: Insert that in it.

MR. STILES: I am wondering if the Fish and Wildlife Service has the manpower to cover all those projects. That would include any, regardless of how small, and

I wondered if it has the manpower.

MR. FARLEY: We have an agreement with the S. C. S. with which I think you are familiar.

MR. STILES: One other item -- I am sure you are all in agreement that the management of our migratory waterfowl constitutes one of our major problems. I am sure we are all aware of the work being done by the Fish and Wildlife Service, Ducks Unlimited and other agencies. Most of this work in regard to duck studies, as I understand, is carried on at the present time below the Arctic Circle, or at least in the southern provinces and the United States. The Arctic Institute of North America is now undertaking a project that will deal primarily with the status of continental population, especially in the Arctic. I don't know as yet how extensive it will be. I understand this next year's program they will expect to have about $85,000 to take care of the work. I think the principle of the thing is fine -- one more agency studying waterfowl -- just that much more that we can learn about their habits, and I think it might be well if we could go on record endorsing the principles of the migratory waterfowl study that is being conducted by the Arctic Institute of North America. There is one other thing in regard to the economic survey on hunting and fishing. I think the Fish and Wildlife Service did an excellent job there. They carried it out very speedily. Their contract with Crossley Surveys, I believe, was signed the first of June -- or July, I believe. Crossley is now preparing contracts and ready to submit these to the states who may enlarge on it, and I think it would be fine if we adopt a resolution commending the Fish and Wildlife Service for the speed and efficiency with which they have carried out this project, which was a result, I believe, of the International meeting two years ago. I think we should consider in the Constitution of the Association among other things -- the Midwest Association is to give consideration to the waterfowl program. It was discussed with the Committee last night as to whether it would be advisable to make a re-study of our present flyway plan -- not with the thought necessarily that it might be disrupted or changed. There has been a lot of controversy over zoning the last two or three years, and possibly we should ask the Service to make a re-study of their flyway plan. Are there any comments on that? If not, Tom, those are the items brought before the Committee last night.

MR. MORGAN (Commissioner, Game and Fish Department, North Dakota): Bruce, I believe there was one other resolution at least mentioned by the Committee, that being a short resolution recommending against Federal subsidies for drainage.

MR. STILES: That is correct. I think we are all familiar with the present PMA payments for drainage. We all recognize that a man hopes to make a living off the land he is farming and that if he can drain an area it's his right and privilege to drain it and put it into farming, but we felt, I am sure many of us strongly, that that certainly shouldn't be subsidized. If an individual cares to do it, that is all right, but no subsidy. Is that about the gist of the thing?

MR. JIM KIMBALL: Might I add that that resolution say no subsidies in the form of financial help or services. By adding that "services" it will make it a good deal stronger. For instance, say no "free engineer's services." I will have a lot to say about that tomorrow.

MR. STILES: I think that is a good point. That is all I have.

MR. KIMBALL: Thank you, Bruce, for a job well done, and the members of the Resolutions Committee. The Auditing Committee -- Harley Hook, Lutz of Kansas and

Paul Gilbert of Nebraska -- Will you please meet with John Hart sometime before you leave and go over the books. I went over my appointments, and I can't find where I have appointed a Nominating Committee. I will ask I. T. Bode of Missouri to act as Chairman, and Harry Ruhl of Michigan and Bud Morgan of North Dakota to serve as a Nominating Committee. Chester Wilson, who was the Vice-President, has retired, which means you will have to have a whole new slate of officers for the forthcoming year. Would you gentlemen get together sometime before the business meeting tomorrow and come up with some recommendations?

I would like to announce that the Crossley Survey Corporation is represented at the Association meeting today by Mr. Carl Henrikson and Dr. Forest Clements. As you know, the International Association asked the Fish and Wildlife Service to look into the procedures for surveying the economic values of hunting and fishing in the United States and asked someone to conduct these surveys. The Crossley Corporation was selected, and Mr. Henrikson and Dr. Clements are here to talk about the cost on both a statewide and a national participation basis. It might be a good opportunity for you directors and commissioners to get together with them and get some information as to the costs and what information you expect to get. Are there any questions on that?

MR. McBROOM: The cost of the national survey is already taken care of by the contract let under Federal Aid administrative funds. There is no further cost expected of the states. However, the national survey will not give figures applicable to the states. It will only give national figures.

MR. KIMBALL: What is the participation?

MR. McBROOM: The participation is through the International. It is not necessary for the states to participate in the national survey.

MR. KIMBALL: You mean it isn't going to cost us any money?

MR. McBROOM: For a separate study for each state there will be a separate cost, and that is an approvable Federal Aid project.

MR. BAGLEY (Commissioner, Wyoming Game and Fish Commission): I notice in some of the information that came to us from the survey group that there would be a charge of from $16,000 to $22,000 for services to the state, depending on the information they saw fit to need or want. I noticed that there was a figure stating a charge to Colorado of $16,000. What is that based on?

MR. KIMBALL: As I understand, the Crossley people propose to get whatever information we desire by the personal interview method. If we want to know how much the small game hunter or the big game hunter or the fisherman spend collectively or selectively on an individual game and fish basis, that can be accomplished. In other words, money the sportsmen spend hunting ducks, geese, pheasants, etc. -- that information in as much detail as we would want can be obtained for that figure because it would be on a random survey personal interview type of thing. They would go through the books and select so many thousands -- isn't that it?

MR. HENRIKSON (Crossley Survey Corporation representative): It won't be known until about the first of August just exactly what we can do these surveys for. We expect to be ready about that time with estimates for individual state contracts. However, the figures set up tentatively are for the minimum job -- that is, for the job of giving you a duplicate of what we will get for the national survey. Naturally,

you can't get everything you want within that range because if you add a great deal to the present questionnaire you can run the costs up.

MR. KIMBALL: Am I wrong in stating it is to be by personal interview?

MR. HENRIKSON: It will be a personal interview job and naturally we can afford to project the data within the limits of error to the individual state. In order to project the data, we will have to expand the same considerably above the sample of interviews we are going to take for the National Survey in the State, and the degree of accuracy you will require for these various questions will determine the number of interviews taken in the State. If you require an extreme degree of accuracy costs will be higher naturally. We have tentative estimates of how many interviews we would have to take in each state to get a certain degree of accuracy on certain types of questions. I am sorry we can't give you more specific information at the present time with respect to the costs, but that information will be available to you around August 1. I have with me -- and Dr. Clements has with him -- the preliminary questionnaire being tested out at the present time under the supervision of Dr. Nicholson, one of Mr. McBroom's men and an excellent man he is. If you would like to go over the nature of the information we will gather, I would be glad to do so. I would also be glad to discuss sampling procedures as we visualize them at the present time.

MR. KIMBALL: Am I correct in stating you could make it as complete a study as the states would want for approximately the same price? If we would want to know specifically what a duck hunter spends on that particular sport, that would cost more money than what you are going to get for the National Survey.

MR. HENRIKSON: You will get a certain amount of additional information within that range -- how much we can't tell you exactly. Within that range -- $16,000 to $22,000 -- you will get additional state information, but there has to be some limit on that, and we won't be able to give you a cost estimate unless we know how much additional information you want on your state problems, and the degree of accuracy and the breakdown you want on the information. Every time you have a separate type of breakdown it means you have fragmentized your sample and the degree of accuracy you get will be less.

MR. BAGLEY: You say this information will be available about August 1? Is it the policy for the State to give you the type of information and questions they desire to have answered, and you in turn will advise of the cost?

MR. HENRIKSON: That is correct. Naturally, there will have to be negotiations on that basis. We are anxious to find out as soon as possible what areas you would like to have made. When you see the cost you may want to cut down and give priorities to the most important. I had visits with three states -- Minnesota, Michigan and Wisconsin -- because these states are similar as to the nature of their resources, and it was brought up that it would be desirable to have comparable questions so that the data gathered in those states can be compared, and therefore any states with a similar type of industry might get together so that those questions on local or regional problems would be stated exactly the same and so the data would be comparable.

MR. STILES: What would be the size of the expected error on the state basis from the National Survey? You use the national figure and reduce the state basis?

MR. HENRIKSON: It wouldn't be measurable, I am sure. They were shooting at

five per cent on a national level. If you split that up, I am afraid you couldn't use it.

MR. SPRECHER: If all the states were in on a special survey of that kind, wouldn't that improve the accuracy of the National and that be conducted concurrently?

MR. HENRIKSON: I believe it can be done much cheaper. Of course, we will be carrying the overhead. Most of the state's costs are for added interviews. The more states that come in, the greater the economy and consequently the less it will cost.

MR. RUHL: Could you have it combined -- Wisconsin, Minnesota and Michigan?

MR. HENRIKSON: You would have to have each state set up separately. If you want individual state results, the sample would be about a third the total sample of surveys in the states.

MR. KIMBALL: If you didn't give the girl at the desk your departure time and the time of your transportation connections, would you do so. Also, we have some Proceedings of two years ago and last year here on the desk for any who have not received them. Frankly, we would like to get rid of them. If you don't have them, pick them up. Otherwise, we will send them to the library or the dump. Also, we have copies of the Constitution if you are interested.

MR. WESTERMAN (Fish Division, Michigan Conservation Department): I think we would like to know about the field trip.

MR. KIMBALL: The field trip we plan is to leave here at various times, depending on when you have to reach Denver. It includes going over Trail Ridge, over into the Middle Park area, to Grand Lake and the Big Thompson Project, over Berthoud Pass to Denver. We will have individual cars to take each party.

MR. LUTZ (Publicity Director, Forestry, Fish and Game Commission, Kansas): How many hours?

MR. KIMBALL: We anticipate it to be pretty much of an all-day thing Wednesday. If we drive straight through we can probably make it in three or four hours. This will be by separate units. We probably all will want to leave about 9:00 a.m., and then, dependent on when you want to reach Denver, conduct the tour accordingly. We will make hotel reservations in Denver in case your transportation doesn't go out until the next morning. Any more questions about the field trip? We are adjourned until 2:00 p.m.

(At this time the noon recess was taken.)

AFTER THE NOON RECESS

(The meeting resumed at two o'clock - - - President Thomas L. Kimball presiding.)

MR. KIMBALL: We have asked each man on the panel to discuss his particular topic for a few minutes. We will go through the complete panel and then have participation from the floor on whatever the panel members have said or left out. We have some changes. Art Carhart unfortunately had a slight heart attack and we have a very able substitute in the person of Joe Penfold, who is the Western Representative of the Izaak Walton League of America, who I think is very well qualified to handle the topic assigned. Also, we have Francis Murphy, who is the immediate Past President of the Colorado Cattlegrowers' Association who will participate on the panel and talk from the viewpoint of the cattleman. Also, in place of myself on Item 4, we have substituted Mr. John Hart, the Assistant Director of the Colorado Game and Fish Department. I would like to introduce the panel members: Lester Bagley, Director of the Wyoming Fish and Game Commission, Carl Norgren of the C. A. Norgren Company, Manufacturers, Joe Penfold, Western Representative of the Izaak Walton League, Francis Murphy, Past President of the Colorado Cattlegrowers, and John Hart, Assistant Director of the Colorado Game and Fish Department. I have asked Lester to talk first and proceed around the table as they are sitting. As soon as the panel is through, we will all participate in the discussion I hope. In that we are trying to record this program, it will assist us if you would speak loudly or if you care to do so use the mike. With that introduction, we will turn the time over to Lester Bagley.

MR. BAGLEY: Ladies and gentlemen: Risking the possibility of infringing on the time and material of the other speakers on this panel, I feel that it is important to review briefly our public land laws which have brought about the vast private land ownerships, as well as the large amount of publicly owned land still held and administered by federal agencies.

The thirteen original states ceded to the Federal Government 237 million acres of undeveloped land, and in so doing established our first public domain. Added to this are the Louisiana purchase, the Mexican and Spanish cession, the Oregon compromise, and the Gadsden purchase, bringing the original public domain of the 48 states to a total of 1,462,000,000 acres.

With this vast amount of public land controlled by the Federal Government, and with the desire to make appropriate disposition and utilization of this land under applicable laws, every effort was made by the government to encourage homesteaders to settle and acquire land.

The first homestead law was passed in 1862, and since that time over 5,000 public land laws have been enacted -- most of them still on the books -- for the purpose of administering and disposition of this land and its resources.

In addition to our homestead laws, large tracts have been granted to states under various laws, to finance schools, institutions, roads and other public undertakings. This amount totals over 225,000,000 acres. Veterans have been given 61,000,000 acres; railroads were given grants totalling 125,000,000 acres for pushing their tracks into the wilderness.

With the passage of the Taylor Grazing Act in 1934 all vacant public land was withdrawn for classification by the General Land Office, a predecessor to the Bureau of Land Management. Purpose of the withdrawal was to classify the lands according

to their proper use, to undertake selective disposal thereof, and to lease them for grazing purposes pending final disposition. Today almost all of the original homestead laws still remain in effect for land classified by the Bureau as suitable units for homestead entry under the various statutes.

In addition to the various homestead laws, public lands may be reduced to private ownership under the recreational and small tract act and may be disposed of by public sale laws. The latter act gives preference to landowners living adjacent to these tracts and permits them to take this land, regardless of high bid, provided they pay three times the amount of the appraisal.

During the past few years there has developed a tremendously increased activity in the filing of mining claims for legitimate mining purposes and for the private acquisition of public lands under the guise of legitimate mining. Such activity is proceeding in a fashion which ignores the recreational interests of the general public on public lands. Such exploitation if allowed to continue in its present haphazard fashion can virtually eliminate the public from hunting and fishing on said public lands and destroy important surface values which are essential to watersheds and fish and wildlife.

At the present time approximately 456,000,000 acres of land in the Continental United States are owned and administered by the Federal Government. This represents one out of every four acres in this country and is far too much land to be controlled by one landlord. In breaking this down we find that there are 161,000,000 acres in our national forests. The Department of Defense controls 20,000,000 acres. The Bureau of Reclamation owns 10,000,000 acres. There are 57,000,000 acres in our Indian reservations which are not, strictly speaking, federal lands. The Bureau of Land Management administers 180,000,000 acres which are generally known as public domain.

These unreserved public lands constitute 25 per cent of the total land area of the western land states and 80 per cent of Alaska. They are, therefore, an important segment of the American natural resource base. Their long neglect from the conservation point of view makes the rapid development of a sound, comprehensive program for future management all the more important.

Although generally not recognized, it has long been the policy of the Federal Government in the disposition of public lands to give primary consideration and precedence to public use, as against private use, in those cases where fish and wildlife resources are involved.

This brings us to the position in which we now find ourselves. I am sure that there are few game administrators who would not be willing to give full credit to the part played by this federally owned land in restoring and maintaining our wildlife, as well as in preserving game fish in the streams. Without these vast public lands it would be difficult, if not impossible, for us to maintain extensive big game populations.

Of concern to game administrators principally in western United States is the reduction to private ownership of public lands and the policy of restoring this land to private interests which oftentimes may not be too tolerant of wildlife interests. I am sure it is evident to most of us in the West that game animals are never as acceptable on private land as on land managed in the public interest by federal agencies. A solid conservation philosophy, improved land management, and vigorous game management programs have been responsible for increasing big game populations

to staggering numbers on most western ranges. The impact of excessive numbers of big game animals on both public and private ranges has been sharply felt by many ranchers. This situation alone has largely conditioned private interests to a feeling of antagonism toward the presence of big game on their own ranges.

In keeping with long standing tradition in this country, the primary objective in our public land policy is still private ownership of lands. In spite of all efforts by the Federal Government to restore public lands to private ownership, however, 53 per cent of the land in the eleven western land states is still in federal title.

Federal ownership and management will, therefore, continue on certain areas. On some areas changes in conditions will permit the alienation of public lands. Prospects are that this process will continue, thus enabling the Government to continue its disposal program, constantly narrowing the federal land base.

Some of our federally owned lands should and will remain in public ownership for the future. Others will have to continue to be managed under private auspices until economic opportunities and conditions are right for disposal. Other acreages are now in the actual process of disposal. The desired goal in the administration of the public domain is to provide and make accessible to the private economy basic resources for economic activity and expansion under the most favorable conditions.

Many of us are inclined to feel that the future needs of recreational and wildlife interests are not fully provided for under our federal land laws. Some have felt that our hands are tied in attempts to reserve public land areas for fish and wildlife purposes. Close examination of the statutes, however, reveals the extreme foresight and wisdom of Congress in providing game administrators with the tools for unlimited activity in the dedication and preservation of public lands for fish and wildlife enterprises.

It is important that we, as state administrators, know how the laws provide for the disposition of public lands and how the states can reserve and assume administrative control of lands needed for fish and wildlife management purposes.

The Taylor Grazing Act of 1934 made specific provisions for wildlife. It is estimated by the Bureau of Land Management that 830,000 big game animals live wholly or in part on public grazing lands.

The Coordination Act of 1946 (Public Law 732, 79th Congress) and related acts authorize the Secretary of Interior to cooperate with federal, state and other agencies in developing a nation-wide program of wildlife conservation and rehabilitation. Public lands may be withdrawn from all forms of appropriation and reserved under the jurisdiction of the Department of Interior for use by state game and fish departments. Public Law 732 also directs that adequate provision, consistent with the primary purpose, shall be made for the conservation and management of wildlife resources on all federal water control projects. Water, lands and other interests involved shall be made available to the Secretary of Interior if valuable to the national migratory bird program, or to the State agencies if the management relates to other than migratory birds.

As a result of federal and state land laws much of the public land of value to fish and wildlife management programs is either actually or potentially within the jurisdiction of state administration. Recognizing this, Congress in 1937 enacted the Federal Aid to Wildlife Restoration Act, and in 1950 enacted a companion program, the Federal Aid in Fish Restoration Act. Under the provisions of these acts

many states are sponsoring restoration projects on public lands reserved for that purpose.

Added to these areas reserved to the states for administrative control, are refuges and management areas which have been created by federal authority and administered by either the U. S. Forest Service or the Fish and Wildlife Service for the benefit of wildlife. There are a number of such reservations in the states. Most of them are part of the national migratory bird management program and, as such, are responsibilities of the Federal Government. Certain other national wildlife and military refuges have the primary purpose of protecting resident game. The protection and management of resident game are responsibilities of the several states. We are interested in protecting refuges vital to the migratory bird program and keeping them under federal control. National wildlife refuges devoted principally to the protection of resident game should be transferred to the several states which are in a position to assume proper management of resident game in the best interests of the public.

The management of game on federally owned or controlled lands should be defined by Congress. Consistent with security measures, state game and fish laws should apply on all military reservations, and game and fish management authority on such reservations should be vested in the state.

I feel that most of us have not been fully aware of the amount of land in the Continental United States which has been reserved for wildlife purposes under various laws. There are at the present time 9,256,096 acres of land in federal wildlife reservations. In addition, the states administer 402,926 acres for wildlife purposes under Public Law 732. The Fish and Wildlife Service administers 20,064 acres for fish cultural and research purposes. As of June 30, 1954, a total of 1,710,553 acres had been purchased or approved for purchase under the Federal Aid to Wildlife and Fisheries Acts. In summary, a grand total of 11,289,639 acres has been reserved exclusively for fish and wildlife management purposes by the states and the Federal Government.

Some revision in our land laws is undoubtedly needed if we are to manage our fish and wildlife resources in the long-range interest of conservation. However, a full appraisal of the lands which have been allotted to wildlife under the public land laws of this nation will reveal that we are in a much better position than we have at many times been led to believe, even by ourselves.

It is a national policy that resources on the unreserved public lands should be protected from destruction and waste, should be developed to the extent necessary to obtain their beneficial use, and should be made readily available for use by the public. To the maximum extent practical, the development and use into productive enterprises will be by private initiative and capital.

None of these principles of multiple land-use are inconsistent with the development of sound game and fish programs on public lands. It behooves those of us in the wildlife administrative field within the various states to sponsor objective acquisition and development programs where public lands are involved, to be alert and to cooperate fully with federal agencies administering these lands, and to explore every avenue of opportunity for wildlife purposes under existing public land laws.

MR. KIMBALL: We will next hear from Mr. C. A. Norgren of the Norgren Manufacturing Company. Incidentally, Mr. Norgren was a member of the Game and Fish Com-

mission for six years and served as its President for four years.

MR. NORGREN: Thank you, Tom.

I have never felt more poorly cast and completely out of character than I am at this moment. All my life I have been interested in wildlife and conservation on a purely personal basis, a good deal like all of you feel, I am sure, as a sort of personal convenant between God and me that we develop, preserve, enjoy and harvest the things of this world in whatever character we find them, and when we pass on the world may be better for our having passed this way.

Today, cast as I am and assigned a topic of a business man's point of view, it seems to me that suddenly the thing has been shifted into looking at wildlife, sports and the cultivation of these programs strictly from the standpoint of what it means to people in dollars and cents. Well, we have a period in our over-all development in which those things follow. We don't fish any more with a bent pin, string and a willow. Much of the satisfaction we get out of going to the stream is out of the equipment that we use in trying to catch a fish. The same way, much of the satisfaction we get out of hunting or whatever endeavor we may have in the out-of-doors comes from the acquisition of and the use of high class equipment. It tests our skill, it becomes scientific, it's a challenge, and I am sure we all become experts.

It was mentioned this morning that we have millions of experts that fill our woods and patrol our streams. That's one of the biggest problems the conservation manager has because there isn't a single one of this vast army of outdoor enthusiasts that doesn't know more about hunting and fishing, I am sure, then you commissioners -- at least he thinks so. I have a whole wealth of figures on the economics of this thing. I am not going to bother you with them except in a small measure to point out first the relationship between monies expended purely for the sport of fishing and hunting and its relationship to monies expended ostensibly for vacation purposes. I can't speak of any state other than Colorado, but I am sure that, with the substition of proper figures, what I will say applies to all of the several states of this Association.

We have issued in 1954, our last complete year of course, over a half million licenses of all kinds - 532,000 - with a total revenue of three million dollars. An extremely conservative estimate and analysis of the monies expended by that half million people in Colorado is in excess of $75,000,000. It is interesting here in analyzing the figures to find that of the $75,000,000 much more than half is expended by non-residents. Actually, out of the 532,000 there are about a fifth of the licenses that are non-resident, and yet much more than half of the expenditures come from non-residents. In Colorado in 1954 again we have estimated gross revenue from tourists alone of around $300,000,000. Back in 1948, when I was a member of the Commission, we started the first analysis of the attitudes of tourists to determine why they came to Colorado. It was extremely interesting to discover that between 60 and 65 per cent at that time of all of the replies to the sampling of the tourists who came to Colorado -- between 60 and 65 per cent said that they were actuated in coming here in considerable, in large, or in total measure because of the opportunities afforded them and their families to fish, to hunt and that sort of thing.

Now it is unreasonable to assume that, if we did not have fishing or hunting, all the people who indicated they came in considerable measure because of that opportunity would not have come at all. We have many interests in Colorado -- the mountains that are a lot of fun for a lot of people, but nevertheless we know that

a far larger proportion of those people would have gone to other places where these recreational facilities would be available and not to Colorado if we could not provide them. This would indicate that, in considerable measure, the income from the tourist trade instead of being $300,000,000 would have been some very considerable amount less. It is fair to assume that half of the expenditures of the hunters and fishermen who bought licenses totalling $75,000,000 would be cut in half. Don't you see that business has a perfectly selfish concern with this problem? I should say that if we in Colorado put the net take of business resulting from the wildlife tourist trade alone at $150,000,000 a year, we would be putting it conservatively.

You see, I have omitted all the expenditures by the local hunters and fishermen. They are here anyway, and it is presumed it is entirely proper they would spend their money here, so that we have an economic aspect of this business of fish and game and conservation that has never been driven home hard enough to the community.

It's perfectly ridiculous, really, for me to talk to this group — I'm talking to the wrong people. You know the answers as well as I. We should have this room filled ten times over with business men from Colorado to sell them a sense of responsibility for development of these wildlife resources, aiding us in putting things over that need to be presented properly to the Congress of the United States and that sort of thing instead of doing that ourselves. We can be accused of being a pressure group because we are concerned with wildlife affairs. I say "we" because I still feel I am part of you. If we had business go along in strong measure or by strong resolutions such as you have developed this morning, to go to the Congress to defend and support the thing you men are devoting your lives to, your problems would be ever so much more easily solved, and so much more to the point than at present. I don't know how to do it, but I know it is something I would like to leave with you to think about and explore in your own community. You can bring these points to the attention of your Chamber of Commerce, your business associates and see if they too won't accept and adopt some of these resolutions and go along with you as an adjunct of this business of getting the Congress to see the importance of what we think is terribly real.

My friend Murphy of the Colorado Cattlemen's Association knows that livestock and agriculture are the biggest business in the State, followed only by tourists and that is tied in with this business of wildlife and conservation. When we go to the business men of Denver, we have a most terrible time selling them on their responsibility to be actively interested in and contribute to the development of our agricultural and livestock resource. It is a time-honored custom in which business people learn to accept the thing that is inextricably tied to it. For instance, the support of Denver and the larger cities of the State comes in large measure from agriculture and yet very little is done to support it. I feel that the business interests of the State should be brought to a full awareness of their responsibility to wildlife resources and conservation. There is not a single business in the State that is not affected by the thing you represent, from gasoline and clothing, to tires and sporting goods, food and every conceivable kind of thing that makes up the business of living and also makes up the business of hunting and fishing. You should attempt to get every organization and sportsman to become vocal in their own self interest in supporting resolutions and actively doing something by means of time and work, as well as money contributions, to accomplish the jobs that you people almost single-handed are undertaking and doing so creditably. I know your job would be simpler. I know it would be a richer and fuller experience and certainly your accomplishments would exceed anything you have done to date if you could get that sort of cooperation from the business community whose interest in this business is even greater than that of the individual hunter, fisherman and conservationist. Thank you ever so much.

MR. KIMBALL: We will now hear from Francis Murphy, immediate Past President of the Colorado Cattlemen's Association.

MR. MURPHY: Mr. Kimball, and members of the Association of Midwest Fish and Game Commissioners:

I have spent a large part of my life on and working with our public lands and the public lands have filled a very important place in my early life.

My wife and I came over Milner Pass this morning. It was a very lovely trip. I never get tired of going over this Pass. As we came over this morning, I could not help but appreciate the fact that I was born to live in this wonderful country and that I am a part of it. You know, it could have been possible that I had been born a Chinaman and would have had to wrestle my existence from the barren soil of China, or born in India where thousands starve to death every day. But I am here in America! The Country we must appreciate because there isn't any place like it on this world.

In 1882 my father walked into North Park. He had only thirty cents in his pocket. He went to work for $15.00 a month on one of the few ranches in that area. The next year he filed on a 160-acre homestead and from that homestead he built a ranch. There, at that time, was one of the natural resources with which you folks are working here today. A resource that made it possible for the early pioneers to survive and settle the country. That resource is the big game which was so abundant at that time. The deer and elk were numerous in the mountains and the antelope were everywhere across the plains. One of my father's main sources of revenue was in the fall when the weather was cool to kill a wagon load of deer and elk and take this meat over Berthoud Pass to the mining camps of Central City, Idaho Springs and Georgetown where he sold it for two cents a pound. He found a market for this meat because the game in that area close to the camps had been killed off. With the money he received for the meat he bought flour, sugar, coffee and the things he had to have in order to live for another year. Anything he didn't get at that time he went without.

In those early days the first cattle were being brought into the mountains from the plains area and the numbers were steadily increasing, from the Colorado River north to the Wyoming boundary. With the big outfits running large numbers of cattle, it made it hard on the settlers who only had from fifty to one hundred head of cattle, because they were drifting so far from home when they were turned out on the open range. I started riding the roundup when I was six years old. About that time the Forest Service first took over the grazing on the National Forest and permitted a certain number of cattle to run in a given area. This cut down the number of cattle on some of the over-grazed ranges and was a good thing as many of the ranges had been over-grazed. Later the Federal Government took over the administration of the balance of the public lands and now all the cattle are on this land under permit. The trouble is: Now we are going from the over-grazed condition into one where, in many places, the cattle are taken entirely off the range or the numbers have been cut so low that the forage is not being utilized except by a very small per cent.

The pendulum is swinging too far in the other direction. It has gone from one extreme to the other. Why can't we get it back to center and utilize the feed on the ranges as it should be utilized?

Last fall I was down to Salida to ride a forest range where a friend of mine had been requested to take 188 head of cattle out because it was over-grazed. We rode

over thousands of acres and there was only one water hole and one fence corner that showed any excessive grazing. On most of it you could not tell there had been any cattle there. The seed was ripe and it would have been beneficial to the range if cattle were on it.

The public land of this State and all of our western states is a rich heritage. We must value it; we must appreciate it and we must see to it that the natural resources which come from these lands -- timber, grass, minerals, oil and wild game besides many others -- must be utilized to the utmost but not destroyed. These public lands belong to all the people of this nation. No one person or no one group should use them definitely for their own purpose without paying for that use. The earnings from these resources must be used for the benefit of everyone and not be put directly back where one group of people will get all the benefit.

The first purpose of the Forest Service was to protect the timber from waste and fire. The grazing privileges were sold to the stockmen by permitting certain numbers of cattle on the range and the stockmen paid a fee of so much a head. This regulation was a good thing for the range as there were places that had been badly over-grazed. The stockmen opposed this regulation but it had to come.

There was so much talk about the cheap range the cattlemen had on the public domain, but when the loss and the expense which was connected with it was figured it was not cheap. I can make more money today on deeded and leased pasture than I ever could on public land because the loss is so much less.

In 1916, when the grazing homestead law was passed, which permitted a person to take 640 acres of land instead of 160 acres, this law made it possible for much of the desirable public land which was still open to come under private ownership, thus making private pastures and bringing it under closer supervision and control.

In the 73d Congress this law was repealed and a bill was passed which is known as the Taylor Grazing Act. This Act brought under Federal regulations the remaining land which was still known as open range. Permits were issued to run livestock on this land in much the same manner as the Forest Service regulation.

I can remember when the big game in this country was almost extinct and you would only see two or three deer during the summer while riding the range. There was more than one reason for this decrease in big game. One was the shortage of winter feed; another was over-hunting and the havoc caused by coyotes and wolves. With the passing of the wolf and coyote due to poison programs that were put on, we could see a steady increase in the big game, especially the deer.

I appreciate the position of the game and fish administrators in administering their programs. They have problems that are hard to cope with such as the hunters who do not realize the meaning of private property or know that the owner is paying taxes on this land and trying to make a living from it. The erroneous point that a lot of people have is that the stockman on his ranch is just a romantic figure in a playground wonderland. This point has been fictionalized and publicized to that end. But there is no truth to it I tell you today with the present prices of cattle, the high cost of operation and labor and the drouth -- there isn't much romance in it.

The stockmen are some of the greatest conservationists of game that we have. We like the big game; we don't want them to become too numerous, but that doesn't worry us so much as the ever increasing number of hunters who hit us in the first few days of the season. They disregard signs, fences, private property and everything that moves is a deer to them.

As I said before, we have the greatest country on earth and the one thing that stands out in my mind is that we must preserve it. We must hand it down to the generations who follow us in better shape than we received it.

There is room for all of us but we have to work together on this program. There is one thing we can't forget nor overlook and that is that the hunters are increasing every year and that the area in which to hunt is on the decrease. We have to consider these things and follow them through and the only way we can do this is to work as closely together as we can, because anything injurious to agriculture and livestock is hitting the backbone of our nation. There are selfish men in the livestock business, the same as in anyother business. There are men prospering from the public domain. We could single them out as individuals and have laws passed that would put restrictions on every man in the industry, but that would not be fair because the hunter who violates the right of private property by cutting fences, killing livestock and many other violations cannot be caught and they are many times more numerous and there are already laws to prosecute them if they could be identified. These are problems we must face.

The stockmen feed a big per cent of the big game on private land and most of them do it generously. They realize that if it were not for the big game the pioneers who settled this country could not have survived. Those people came in and developed this land. They built it for the future. We in the present must also look into the future and do our best to preserve it, work with it and maintain it. I know your problems are many and I am sure you are thinking along the lines I have outlined. We must work for the welfare of this country and our people first, last and all the time.

The stockmen are not opposed to a lot of the program as far as the game is concerned, but the livestock interest is the biggest tax-paying industry in the State and consequently in the past years there are just two things that made this nation great and strong -- agriculture and industry. Production is the only thing that will keep this nation strong -- let's not sacrifice it!

Thank you folks.

MR. KIMBALL: We will now hear from Joe Penfold, the Western Representative of the Izaak Walton League.

MR. PENFOLD: Having lived a few years in China, and knowing something about their problems, I am satisfied that our international situation would be a whale of a lot different if Pat Murphy and a lot of other like he had been born in China.

I should start out by expressing Arthur Carhart's regrets at not being here. I know that those regrets are sincere because he had been looking forward to participating in this discussion and the chance to visit with many of his old friends. I am certainly no person to try to pinch hit for Art to express the conservationist's view on some of the problems of public lands. I am not even sure what a conservationist is. I am not sure that I am one. Is it for me to say, for example, that a lumberman is not a conservationist who looks at a stand of timber from the standpoint of timber and says what we ought to do is clear cut it because it is overmature, because we are going to lose it otherwise? Good conservation means to salvage every stick of timber off that that we can.

Who am I to say, if Pat Murphy or one of his good colleagues looks at the range and says we can carry satisfactorily so many head of cows or sheep if we reduce the

sagebrush and big game competition? Looking at it from the standpoint of grass or production of beef, wool or mutton, am I to say he is not a conservationist? Or should I say that a top-notch biologist is not a conservationist who says if we let the beaver multiply in this area we are going to increase our wetlands and trout production and do a much better job of perfecting and improving our fishery resource? In other words, I think the conservationist, if I am one, has to be all of these. Certainly I have got to side with the logger because I use the production he makes available to me. I have to side with Murphy because I surely eat his beef every chance I get -- preferably rare. Certainly I must side with Tom Kimball and his staff and colleagues in other matters because I want to go out and harvest fish when I can and big game when I can hit them -- in season, of course. A conservationist has to be looking at the whole picture.

On the other hand, I don't think conservation is merely a statistical or financial addition of the economic value reached by the livestock industry out here or the tourist industry or the fishing industry or the logging industry or the water industry, if you can call that an industry. I think conservation is a lot more than that. We in the League use one of these old generalities, which tend to be true if you don't try to apply them too specifically. We like to say that hunting and fishing after all is the result -- it is the welcome by-product -- of good land and water management. I think that is true as a generality. I think it is every bit as true of the livestock industry or the forage that supports big game. That it is just as true of the timber produced off our forests -- that our by-products are something better than we at this moment -- prejudiced by our local, state, national and international political situations, the whims and desires of give and take and play of the economics of the moment -- I think conservation goes far beyond that. I don't think that man himself has the ability at any one moment -- to sit down and chart and say this is the maximum and most that our natural resources mean because we are thinking in terms of the present automobile I am driving, the present highways I am driving over, the house I am living in, the taxes I am paying.

On public lands I think we have a unique opportunity to demonstrate man's pretended ability, which I think we have, of looking beyond the ends of our noses, looking beyond our immediate desires and needs. I think our public lands are somewhat different from the corn-hog-dairy production regimen of the corn belt where we anticipate and probably have to, and decide what we do today must be predicated on the situation as it is today. So we grow corn today and the market breaks and the subsidy isn't high enough and economically we have to do something else tomorrow or next year. On our public lands we have the opportunity to look beyond just that. A lot is said about the economics of the public lands as they produce wealth, as it supports this community in which we are situated at the moment and hundreds of others. Certainly we cannot discount anything of that sort. There are such values. But it is awfully easy to switch from that position to the other that the function of the public lands necessarily is to support for example this particular community and what this particular community may happen to want or its Chamber of Commerce. I don't cite Estes Park as an example but that is where we happen to be. We have that tendency all over the public lands states, so-called, that they are for the purpose of promoting this particular community or this particular industry at this moment. I think we can get into that kind of situation, and I am confident if we do and stick with it in the long run we are going to lose some of the ultimate values these public lands could provide for us and coming generations.

One of the biggest values we have in this high mountain country, of course, is water. We do know -- I think everybody is agreed on this with very little argument -- that water is the basis of everything we do in this arid and semi-arid country. We

have got to protect those watersheds almost regardless -- that's what we must do. If our game populations have to be decreased, I as a conservationist say O. K. because I also have to use water in Wheatridge, Jefferson County, where my home is. We have to protect those watersheds regardless, and I think more and more we are coming to that point of view. These are public lands. They belong to everybody. But, do they?

In your discussion this morning about resolutions, one was discussed having to do with mining laws. These lands belong to everybody, and yet under our mining laws you can take a bulldozer anywhere on the National Forest and go to work hunting uranium. In this uranium deal, the maximum damage is being done in the prospecting, not in the recovering of minerals. No one will argue about the need for uranium. But, have we reached the point yet where we can without argument go in to rugged, 20-30-degree slope country with bulldozers and scoop out trenches to the gravel or bedrock three, four or five feet deep and a quarter of a mile long? Those won't heal up for a thousand years. That isn't for the recovery of uranium, but in prospecting. It's something to think about. If we need it so badly, maybe we are going to have to take some other steps short of the final destruction of extremely important resource values that all these gentlemen have mentioned this afternoon -- the public highways are public lands too. Yet we do have traffic laws on them, and I wonder if there is any substantial difference for me, if I want to drive tonight from Estes Park back to Denver, to drive at 100 miles an hour because I am in a hurry to get there, and my taking a bulldozer over a piece of country and destroying it because maybe I will hit a strike and get rich quick. To me there is no difference. I think resources are a darn sight more important to all of us and to me personally than the destruction I can cause in that manner. I think we are going to have to have that kind of regimentation, if that's what it is, the same as on our highways, as fire laws, and, if you live in the City of Denver you now have to put your dog on a leash. I think that is the deal we are going to face and I think our big choice when we hit a population of 250,000,000 to 300,000,000, when every drop of water and every resource means survival value, will be to plot these things ahead of time or go down as failures.

I don't know whether I have talked as a conservationist or not. I know I haven't talked for Art Carhart. I haven't the vaguest idea of what he was going to say. I want to end on this note. As a conservationist, I have to be more interested in the ultimate social value of the opportunity to catch a trout in a sparkling mountain stream rather than bringing home a washtubful of fish which will spoil before we can eat them. I think that is what our attitude has to be toward all of these public land resources. I thank you.

MR. KIMBALL: We will now hear from John Hart, Assistant Director of the Colorado Game and Fish Department.

MR. HART: Mr. President, Ladies and Gentlemen: I am going to refer to public lands as "Mother Earth." If the pronoun "I" appears often, it isn't because I am bragging but I am speaking to you personally and from personal experience. Mr. Kimball came back from St. Louis a year ago and told me he had been elected President of this Midwest Association. I said "Congratulations." He said, "You are the new Secretary-Treasurer." I said, "Oh!" Then I had to put a dime in the cuss box. I wish I knew you better. I have known of the organization for years, and yet, if you will allow me to make a few honest confessions, I don't know why I should be completely alien to you as individuals, even though I grew up on the Utah line, and of course that's God's country to me over on the other side of the Continental Divide. And yet, unless I have been lied to and the statistical records are wrong, Mother left Colorado

and went visiting in Missouri one time, and that is where I was born, in Vernon County, wherever that was. I have a brother-in-law and sister teaching at State Teacher's College at River Falls, Wisconsin, and a nephew with a Master's degree this June at the University of Wisconsin. Possibly you may know some of my folks. So, if I seem a little foreign to you, be tolerant of me.

A lot has been said and will continue to be said about land or Mother Earth, and yet, believe it or not as to the history of the land area this group represents you people in Minnesota have a lot you owe to your University of Minnesota Press. Among my other eccentricities, I have quite a library, and I would recommend reading Mont Sanderson's book on "Western Livestock Ranching" and, if you really want to read a treatise on the Upper Missouri Valley, read "The Land Lies Open," by Theodore C. Blegen and then there is "Land of the Dacotahs" by Bruce Nelson and you will remember Osgood's book, "The Day of the Cattleman," published in 1929, which was out of print for years and because of demand it is in print again. Believe you me that is quite a treatise on Wyoming, Mr. Bagley, and particularly it deals with the congressional records and has to do with these public land laws. I guess my folks were better off than yours, Mr. Murphy. Mother and Dad came into western Colorado in a covered wagon, and I don't know what Dad had but at least he came in on wheels -- He didn't come in on foot. So maybe he was one of the upper class.

Who are you of the Midwestern Association? I think Colorado is the largest one state of the membership. We have some 104,000 square miles. We don't need to brag about that -- Manitoba is four times as big and Ontario twice as big -- so we have to be careful what we say because someone can always call our hand. Yet, this Association represents over 1,372,000 square miles of North America and your land policies very definitely affect two sovereign nations.

Well, of course things have changed and you are not going to turn them back. Nineteen years ago when I was transferred to the Denver office, down here at Lake Estes there was a meandering stream -- no neon lights or power lines alongside thereof. In fact, I have done damage control work there, butchering deer and elk right down here where the lake is now, in the last decade. So that's how things have changed. A fellow by the name of Glidden of Dekalb, Illinois, got a patent on barbed wire in 1864, and believe you me, the picture did change. And those herds you mentioned, Mr. Murphy, came in. Oddly enough, the sheep came in from the other direction -- Oregon, Washington and California, and I am vividly aware that 45 years ago this summer - about 1910 - in my parents' kitchen quite a number of livestock men were discussing what and how to do because they had been running on what is now referred to as this Taylor grazing land, and I can remember my dear Mother using the term "Mother Earth" because my Mother is part Cherokee and "Mother Earth" was her way of speaking of land -- I can remember my Mother telling those people that she might not live to see it but someday, "only you people are going to survive who on a year 'round basis are doing business in your own back yard and come in off of what you have heretofore called free open range." And don't think Mother was a victim of her imagination. Certainly things change. We can't operate on anything less than a give-and-take basis. We in Colorado cannot say to the mining industry, "Move over and let us take all the lakes and streams." We very definitely cannot say to the livestock industry -- to the Cattlemen's Association and to the Woolgrowers, "Move over. We will take over out here. Everything belongs to the deer and elk." Because I am too vividly aware that 99 per cent of the antelope harvest is off patented land, game and range management must apply itself to privately owned as well as public land. About the only antelope we harvest off public domain is in the northwestern part of the State and on some S. C. S. land on the Eastern Slope. Now Mr. Bagley told you there had been over 5,000 laws passed by Congress dealing with

land they will be no small part of the background of the philosophy with regard to migratory waterfowl, upland game and big game. Surely the 27 states and 7 foreign countries represented in San Jose, California, the last week in January and the first week in February were not victims of their imagination when they were talking about how to make Mother Earth produce more on what heretofore I have spoken of as a live and let live basis. I was dumbfounded at the abject poverty in Argentina, Brazil and Israeli, although Israeli is coming to the foreground, as I was in problems of Australia, too far away, I thought, to be of interest to me. Land management and land policies and the administrations thereof live with us day and night. However it's only 63 hours away from the airport down here to the most remote part of the globe, so land problems cannot be remote. There are no frontiers now. I am in the sunset years of my length of service, and I know that the people we serve -- those of your respective states and provinces -- will have for tomorrow and tomorrow and the day after, room for survival; yes, survival and continuity of the wildlife resources, and I shall speak of them because that is our primary duty, only to the extent that we provide a home for them.

I wish I had a little more faith in my fellow man -- I plead guilty to being a little narrow-minded in that regard because all too frequently I have had experiences where I have seen the welcome mat pulled in as far as game and fish and fur bearers are concerned. To a degree, maybe that is your fault and mine -- Maybe we are too selfish, but this public land policy is a problem that is here. It is going to stay with us. We in Colorado have been thoroughly cussed and discussed for our land acquisition program. I don't know of a school house that has been closed because of the fact that we bought an acre of ground -- statements to the contrary notwithstanding. I have here a photostat copy of a bill passed by the 1955 Legislature. Because of the condemnation we took on our land acquisition program, they passed a law whereby the Colorado Game and Fish Department out of its Game Cash Fund will pay money to the school districts in lieu of taxes. I am not going to say that law is good or bad. I am simply saying to the people of the State of Colorado and to you that you had better get your guards up. We are solvent. We will pay for the taxes and we will pay them graciously and willingly because I think we should. I think that if there is a fear that our land acquisition program is forcing anyone into bankruptcy we should pay our way. So that, having paid the price tag, we are entitled to a grandstand seat in all state legislative programs. I know not what the future of that bill will be. I know that assessors in several Colorado counties are literally watering at the mouth to get at us. As far as I am concerned, we are going to sharpen our pencil points very fine. We will pay, but we don't want to be victimized. By the same token, I certainly can go hand in hand with Mr. Murphy and every member of the Association or any other person who has to make their living off of the earth because they have a right in this ever-changing world of ours to visualize themselves as literally with their back to the wall, and every time a bill comes up and there are more and more acquisitions, somebody according to their state of mind, real or imaginery, is going to get hurt. So, like Mr. Murphy and every other speaker on this program has said today, there can't be any bill of divorcement between us. We will either stand or swing together. Now, Mr. Kimball, I know you have been very tolerant, but in all my several decades of service this has been the only meeting I have attended and not a single speaker has told a story. To me that is unique in a public gathering. Water has been mentioned. Is this being recorded?

MR. KIMBALL: Every word of it.

MR. HART: If you must know I wouldn't tell a story unless I could tell it in front of my mother and my sister. I don't have many relatives. Mrs. Hart's relatives

are like the leaves on the trees. I have a good sister in law who for many years was an outstanding figure in Colorado WCTU. I hope she will forgive me if this is ever published. But for years past, she, in attending these regular meetings of the WCTU took a prominent part therein. This particular meeting was in Colorado Springs. There was a character at the Broadmoor Hotel there -- a gentleman who had gone into the barroom every morning to see if there were any live ones around. This particular day he strayed into this WCTU meeting attended by my sister in law. She recognized J. Worthington Shrimpton and of course was horrified, but immediately collected her wits and invited him up to the front and said, "Colonel, speak a few words on water." And he said, "Water. Water." He was trying to get his eyes focused. He said, "Ladies and Gentlemen -- particularly Ladies, as I gaze upon this sea of pulchritude, I am reminded of water. I have seen water in the high Himalayas and I have seen water on the Desert of Gobe, and I have seen moonlight on the waters and lovers locked in fond embrace, and I have seen moonlight on the Mississippi. I have seen water turn the wheels of industry. I have seen water give succor to starving men, but I am here to tell you that as a beverage it is a g--d-- failure."

Well, believe it or not, you will survive only as long as you have it. Thanks for your time.

MR. KIMBALL: There have been a lot of words said. Our panel is now open for any questions or discussion from the floor you care to make.

MR. SPRECHER: I would like to ask Mr. Hart -- In this bill that would provide payments in lieu of taxes to school districts, are you at the mercy of the local assessor or is it left to the State Tax Commission? We had a similar bill passed in Wisconsin, but the State Tax Commission determines how much the school districts get.

MR. HART: It was H. B. 333. It's not as vicious as it sounds. At the same time it was not tip-top land. Using the valuation at the time of acquisition, it may not be too fearful. However, it was sort of like the Irish washerwoman said, "It was the principle of the thing."

MR. KIMBALL: While we are subject to county appraisal on our properties, we do have recourse to the State Tax Commission in the event there is any difference of opinion as to the rate, and so it's not quite as bad as it sounds.

MR. DAMBACH (Chief, Division of Wildlife, Ohio Department of Natural Resources): A question for the panel -- I think most of us have been recipients in recent months of quite a flow of material out of Washington and other places relative to tremendous expenditures for water development in the West, and having lived in the Midwest where the water problem is also critical and paying taxes there, I can't help but wonder if we are being assessed for the development of a resource in a place where it is perhaps not necessary. I happen to live in the capitol city of Ohio, where every now and then we have situations where people can only water their lawns on Monday, Wednesday and Friday. There have been situations where people in restaurants can only have half a cup of coffee because they can't use too much water. We read of these attempts, indicating that tremendous expenditures are being demanded by the folks in the West for development of water as absolutely essential to your welfare. I would like some comment as to whether it is essential that the tax revenue be used for that purpose or is that a thing the local government can take care of?

MR. KIMBALL: Don't all speak at once. I might pinch hit for the panel on this

particular question. Charlie raised a good point. I think if you will go over the records you will find most of these so-called projects for the development of water must be repaid by the people whom the project serves in the way of irrigation, of power, or whatever type and kind of service. It is true you might have to discount the interest that would normally have to be paid on those big projects. Certainly no state government or any local government could finance a project of that magnitude. So much for the economics of it. As far as necessity is concerned, that is a matter of opinion. Take the Upper Colorado Storage Project, which is one you may have reference to. We have a compact between the upper basin states and the lower basin states which in effect states that Utah, Wyoming, Colorado and New Mexico are to receive let's say seven million acre feet of water from the Colorado River Basin, and the lower basin states -- Arizona, Nevada and California -- are to receive let's say another eight million acre feet of water. That's a compact that has been ratified by the various state legislatures and the Congress of the United States. As it happens, the only dams and use of the water are in the lower basin states, and particularly the State of California. Maybe some of this propaganda that you have been reading has come from a state that would like to see that no development projects be made so that they can use the whole 20 million acre feet that runs down the river. You are not alone in Columbus, Ohio. I can only water my lawn in Denver on Monday, Wednesday and Friday. The thing that impressed me about Denver when I was stationed at Lowry Field was the fact that Denver 10 years ago was the most beautiful city in the United States from the standpoint of its beautiful lawns. Watering was unlimited. People were letting water run down the gutter, mowing their lawns every day and watering all night, I guess. In that space of time, the growth of Denver has been such that you can't water shrubs or wash your car on certain days. If you could do it, you would develop projects in Ohio, wouldn't you to furnish additional water? The same thing is a matter of necessity as far as Denver and cities like Salt Lake City are concerned. They consider it essential. Now there is some irrigation included in the project. We are not alone in the Upper Colorado River Storage Project. The same thing has been proposed, I imagine, in the Missouri Basin and the Mississippi - anywhere where the drainage of wetlands, which we are opposed to, or irrigation projects, which tends to bring more land under cultivation. People have questioned -- and I question it -- why do we need more production of agriculture when we have so damned much now we can't find a place to store it and the Government has to pay a subsidy on it to keep the farmer in business. Maybe we don't need it as far as agriculture is concerned. However, let's look at the specific projects, for example the Frying Pan-Arkansas -- where there is additional land being brought under cultivation, which again means more production of agricultural commodities than are needed. The thing is too broad for me to try to explain in this instance. However, when people don't have enough water for their glass on the table or where they can't wash their car or water a lawn, I think the time has come when we can all call it a necessity. As long as the people whom the project serves are willing to pay back at least the capital investment which the Government has advanced to complete the project, I think the taxpayers in Columbus or New York or Pennsylvania shouldn't complain.

MR. DAMBACH: It depends on your source of information. The estimates given to us are that it is costing in the neighborhood of $5,000 to $10,000 an acre to develop land for irrigation purposes. Raymond Moley has published it. It's been in the Readers Digest. You can get copies of publications from the Institute -- I am raising the question -- I sit back there and I would like to hear your side of it.

MR. KIMBALL: Using one set of figures that may be true. But, considering the aspect of power development -- You have heard of Echo Park and Glenn Canyon Dams on the Colorado River. One purpose of these Dams is to store the water for delivery

for whatever purpose, and the other one is to develop power to pay a major portion of the cost of these projects. Certainly if you add up the total cost of a project and then divide the number of acres of land to be irrigated you might come up with an enormous cost figure per acre, but by the time you deduct the value of the power that is developed and sold as a public utility I would say that that figure would be reduced considerably. However, what difference does it make if the Government is going to be repaid in a specified number of years by the people the project serves? Congress requires methods of re-payment. The project is to furnish water to irrigation farmers who are to pay for it at a specified rate. Power developed is to be sold at a specified rate to help pay for the project. Those people who are opposed to a project manipulate the cost figures completely out of proportion and reason. As long as the people whom it serves pay for it, what difference does it make, regardless of these misrepresentations?

MR. DAMBACH: If what you say is right, you have a terrific educational job on your hands.

MR. KIMBALL: Let's take an example of a completed project in the same river basin. I don't know how many have been to Lake Mead and Hoover Dam and have seen that development there. Now there's a project that was established, built and it is now being paid out in the same manner as the Upper Colorado Project is planned. The power is sold to Los Angeles and southern California is paying that project off ahead of schedule, and the land that has gone under cultivation in the Imperial Valley in California is producing the best crops in the country. Those farmers who own that land pay for that water which in turn is paying the Government for the development of the project. As long as this type of repayment policies are in effect and Congress requires they be complied with, any reclamation project which can be repaid is in the public interest and should be constructed. The repayment periods to the Government extend for a maximum of 80 to 90 years, I believe. Jim, could you help me on the repayment matter?

MR. JIM KIMBALL: Ordinarily they try to get those out in 50 years. They have to have special legislation if they go over 50. I think the irrigation part of the law calls for 40 years.

MR. KIMBALL: Let's take another project - Hell's Canon. The Government proposed to build one high dam. They are now squabbling with the Idaho Power Company who wants to build three low dams. If it's poor from the standpoint of economics I don't think you could interest the Idaho Power Company. I too am confused with the conflicting figures and apparent facts that come out. There are two sides to it. Congress requires that the money be repaid. Wildlife benefits don't have to be repaid. Certainly I am not going to quarrel with that and you wouldn't either. From the standpoint of economics, a member of the panel, Mr. Norgren, pointed out what the tourist industry means to Colorado in dollars and cents. Certainly, if the Federal Government spends a little money to mitigate a loss to wildlife as a result of these projects, I don't think the people of the United States should quarrel with us. The big bulk must be repaid. That's fact No. 1; the second, we need water in Denver just as you do in Columbus. They expect to reach a million people in Denver by 1960. That's rapid growth. Denver is one of the fastest growing cities in the United States. People have to have water on their table and take care of their household necessities the same as anywhere in the United States. The time will come when the waters of all these basins will have to be harnessed and utilized. On the priorities already established the City of Denver is buying up irrigation water. There's productive land that is going out of production now because of the higher domestic use being made of water. Carl Norgren owns a ranch on the Fraser River

where the President fishes. The City of Denver is building a tunnel to divert that water, and Carl and the President are going to be out a fishing stream, and his ranch land and productive land is going to pass out of the picture with it. The law establishes priorities for water. If you need it to drink, some farmer is going to have to go without irrigation water. On the other hand, statistics tell us we are going to have too many people in the year 2000. We are going to be like the people in India and China. I don't think any development is too expensive when people are starving. Sure, we need a good public relations man to bring to the public's attention many of these salient points. Maybe we should spend a little time and money on a good public relations program.

MR. PENFOLD: I won't comment about Echo Park. Chuck, you are right. These projects -- all of them -- are going to be expensive. Good, cheap projects have been built. Every one is going to be more expensive. That isn't necessarily important. The important thing is the ultimate values we are going to get out of them. In that connection, you should remember very well that under our western water appropriation doctrine wildlife is not recognized as a beneficial user of water, and I mention that particularly for you fellows from the East because during the last sessions of eastern state legislatures some 25 or 26 states were considering laws which would, if enacted and carried out, move away from the old riparian rights doctrine and take up the appropriation doctrine under which the western states have operated. It's something for you fellows to consider seriously and see that wildlife is recognized in any such laws you enact. Denver is going to grow -- maybe to a million -- there may be a million and a half. Ultimately, Denver will reach the time when it has no water and it can no longer grow unless it curtails usage. I say we should not put off all those decisions for future generations. We have to start facing them today and start figuring -- Are we always going to water our lawns or can we preserve one or two examples of a mountain stream? Those are the sort of things we have to face. So the evaluation of our western projects shouldn't be entirely on thebasis of what they are going to cost in dollars because there are other values involved which, as far as I am concerned, are just as important.

MR. NORGREN: One or two points that I don't think have been touched on vigorously enough in your statement that we need a press agent -- This is a very good one. Contrasted with California we have none. The California water lobby in Washington is one of the highest paid, skilled and most effective that ever has appeared on the public scene. They are the ones because you people east of here are not aware of what you see out this window and will now accept any statement made because it is reasonable in view of your own personal experience. Your land doesn't stand on end as it does here. From here to Utah for 250 miles, outside of valleys, there is no land other than mountains. The snow accumulates in seven or eight months. It runs off in four. Yet there is no provision made for leveling off the runoff over a 12-month period. This land on the Eastern Slope can very easily revert to desert. California has grown industrially and in population faster than Colorado. Therefore, the beneficial use placed on this water which seemed reasonable a few years ago -- They signed and we signed it in good faith -- Every effort is being made to destroy it -- tear it down. The very fact that you, an intelligent man in the conservation field, by reading eastern publications have been influenced to think that is an important thing, is evidence of the fact that we need a high-powered lobby to counteract that very thing. I hate to think of lobbying when we think of the element of life, water, without which nothing is important. However, one of these projects is based upon irrigation, power, domestic use, conservation and flood control. If you take a 100-million dollar project and only a few thousand acres are going to be irrigated and divide that by the cost, as Tom said, you get a fantastic figure. The highest figures I have heard of of actual irrigation projects have been

$300 an acre, and we in the West think this is a hell of a little to pay for irrigation. Yet you can go anywhere along the Eastern Slope where there is irrigation and if you can buy that land for less than $500 you are very good. You say it can be paid back when values are put on which should be. The important thing for you as an easterner and all easterners to learn --

MR. KIMBALL: They are midwestern.

MR. NORGREN: They are east of here -- Is that half of Colorado is on end, and we must conserve during four months of runoff or else the eight months will constitute a desert condition.

MR. SCHMIDT (Regional Supervisor, River Basin Studies Office, Fish and Wildlife Service): The idea of conserving is a relative thing because you have to take into consideration that conserving is wise use, and it is wise use by a certain number of people. We tend in the wildlife field -- at least we have in more recent years -- to try to enforce a certain amount of conservation of our wildlife. We call it carrying capacity. Actually it is conservation of food supplies in relation to the number of game animals you have in an area. Of course they don't know enough to conserve it so we step in wisely and regulate the herds so that will restrict the numbers to a point where they will remain in balance with the resources. There is no argument with the things that have been said today. Any one taken by itself and most of them taken together make true statements. We have often heard in America that we have made the dollar sign our God. I think we have been accused of that by other countries. Perhaps we have. We have made another god, I am sure, and that is the god of growth. There are places in the country which will carry a great many more people than others. I think Ohio is one of them. A few years back, when I was looking into the facts of the situation, the amount of agricultural crops sold here in Colorado amounted to five hundred million dollars. In Ohio it amounted to 28 billion dollars. I think those two figures give a good idea of the relative carrying capacity of those parts of the country. Penfold brought out the fact that Denver is sooner or later going to reach the place where it can grow no more. It is going to reach that point at a lower population than some of these eastern cities where they have a greater carrying capacity for people. Albuquerque is the same way, and I think the problem is if we could ever get it across to try to realize that instead of making a god of our growth perhaps we can substitute an ideal of living conditions until the point we are going to be overwhelmed by population. Perhaps we will reach that sometime. Denver is aiming for a million or a million and a half people. We are told if we had the amount of water we wanted to maintain certain minimum flows in the Fraser River, which I think amounted to perhaps 30 per cent of the flows available, that would mean 40,00 less people in Denver. And yet 95 per cent of the people who enjoy fishing on the Fraser River are Denver people. I will admit the idea of turning our Chambers of Commerce back in on themselves and getting away from the god of growth -- Probably no one would ever consider it anyway. We can't go to the maximum in people and hope to have anything else left. It all boils down to having a Saturday night bath and a glass of water on the table. Perhaps in a choice between people and ducks I will take the humans. We don't live by bread alone. We are going to have to make some long-range decisions and plans for a part of this water for fish and wildlife purposes -- try to up the balance there. I think perhaps at the present time a number of the western states have come out in front -- It shows a high consideration and the feeling that is growing among the people that some of this water should be reserved for fish and wildlife. We have lost practically all along the Rio Grande. In fact, my house is in an old slough where my neighbors used to hunt ducks. But the movement against that thing has been illustrated in a recent consideration that was given to devote a part of the water we hope to get to transmountain diversion.

from the San Juan Basin, devoting part of that to fish and wildlife. When a state will give consideration to a state game department making an application -- Ten years ago it would have been ridiculous....It isn't all one sided, but if we are going to have good living conditions we have to aim for the maximum amount of people we are supplying the good American way of life for.

MR. KIMBALL: I might tell you the story of the freshman senator that went to Congress and the senior senator got him in his office and said, "Now Joe, the first thing you have to learn is that a billion dollars isn't a lot of money." I think that typifies to a certain extent our Government. When we talk about $10,000 an acre and a repayment plan for reclamation projects and we are talking about $4,000,000,000 in foreign aid and such things as that, which is all necessary, as Ralph has said to the "god of growth." I don't think the U. S. Government is going to spend four billion dollars on foreign aid unless there is some reason behind it, say to protect business abroad. Maybe a certain amount is from the humanitarian standpoint, but very little, I'm afraid. The same Government philosophy can be applied to reclamation projects. There are reasons for them.

MR. DAMBACH: I want to make it clear that I want to be an intelligent citizen as I cast my vote with the people who represent me, and I have to base my decision on the facts that are at my command, and these facts which have come to my attention on this subject are pretty much as I have represented them and not as represented here. The reason I asked the question was I wanted to hear your point of view.

(The meeting adjourned at 4:30 p.m.)

TUESDAY, JULY 19, 1955

Mr. John Hart, Secretary-Treasurer of the Association, presided and introduced speakers as follows:

JAMES KIMBALL (Director, Minnesota Conservation Department, speaking on the subject "The Need for Action in the Wetlands Preservation" under the general subject of "Waterfowl"):

Mr. Chairman, Ladies and Gentlemen: I am very pleased and honored to be up here in front of you today, and particularly because I am sure I was selected on the basis of my long and successful career as a fish and game director. I think I have been a Director long enough now to measure it on the calendar -- not just on my watch.

I am not going to waste a lot of time trying to be humorous or trying to tell you people how important wetlands are. I think most of you know as well as I do. I want to cover that point by saying that our capable Regional Director of the Fish and Wildlife Service in Region III has said that drainage of wetland habitat is the most serious wildlife conservation problem in his entire region. That same sentiment has been expressed by your old friend Frank Blair, and to that I would like to add my small voice.

We are actually losing about 3 per cent of our wetlands, marshes, sloughs and swamps each year. That may not sound very big for one year, but in 10 or 25 years the amount lost is alarming.

I want to make it clear that I am talking about production habitat. In Minnesota and for the most part in the Dakotas, there is ample habitat for migrating birds and we don't have much need for wintering habitat. We are talking entirely about production habitat. I wish I had my slides. The maps show so much more graphically where this pothole region is. Originally, it covered the northwest corner of Iowa, extending north through the eastern Dakotas and the western third of Minnesota. Now it isn't that big. Iowa once produced three to four million ducks a year. Now, of course, this production is largely lost. In southern Minnesota, too, wetlands have been practically wiped out through agricultural drainage. I would say we have already lost one-half to two-thirds of the productive habitat of the prairie pothole countries, and we are continuing to lose it at the rate of 3 per cent a year. The prairie pothole country is not confined to the states. In fact, there is more in Canada than in the states, but the part in the states is highly important. The total pothole country produces about one-third of the total continental waterfowl population, and you can imagine how important it is to us in the Mississippi and the Central Flyways. About one-fourth of this production is in the three-state area.

When we talk about drainage of potholes, marshes and sloughs, it is easiest to divide them into two groups -- first, the level land, the deep, fertile soils of northwestern Iowa, southern Minnesota and the Red River Valley of the north. For the most part, these fertile lands have been lost to waterfowl. They were highly productive but drainage has now been nearly completed there. We won't spend too much time talking about it. Some marshes remain and we are going to do our best to save them, of course. The second division, which is much larger and more important, includes everything else -- most of the western half of the two Dakotas and eastern Minnesota north of the Minnesota River. Here we have rough

to rolling terrain, with soils which are highly fertile but shallow and extremely susceptible to erosion by both wind and water. Here drainage is taking its toll very rapidly, and we can't talk about drainage, potholes or ducks in that country without talking about subsidies so we may as well bring them into the picture now.

A lot of people may tell you subsidies have little long-range effect on this tremendous rate of drainage. They say most of these wetlands would eventually be drained anyway and admit only that subsidies might speed it up a bit. This is probably true in the area where drainage has already been done, but it is not true in the rough to rolling erodable country. Here we are thoroughly convinced that subsidies are the primary factor in the drainage program. For example, a farmer may have a pothole of two acres and knows it will cost $500 to drain. I don't know what the divisions of costs are, but let's say that it would cost him $100 for engineering services and $400 for earth moving. That is $500 for two acres. The land is not worth $250 per acre so it's not a practical project. But when he can get technical engineering services which eliminate that cost entirely and then when A.C.P. says, "We will pay half the earth-moving costs," now he has a bill of $200 instead of $500 to drain that pothole. It still might not be worth $100 an acre, but he looks at his farm that has been going down hill year after year. Because of erosion it doesn't pay its way any more. He looks at that pothole and knows that is where his top soil lies and he sure would like to get another crack at it. He decides to drain. The subsidy program is making drainage practical farther and farther to the north and west. In other words, most of the truly economical and feasible drainage has been done. Subsidies are pushing the point of diminishing returns for drainage farther north and west until now it has become economically feasible for most farmers to drain a fairly high percentage of their potholes. It has become practical for the farmer, but it is not impractical for the United States Government and for the taxpayer. The fact that the money is coming out of two or three different pockets doesn't make it a practical project.

Speaking of the taxpayer, we have a strange situation here because, with these two subsidy programs, he pays the farmer to drain his potholes. This means increased farm production, still greater farm surpluses, more storage bins and costs, greater support prices, etc. The payment the poor old taxpayer makes for this original subsidy is just the beginning. As if that weren't bad enough, he has subsidized the destruction of wildlife habitat. So now that we have subsidized this fine habitat out of existence the taxpayer again throws in some more money to try to replace what he has destroyed. At great expense we have to build habitat but we cannot replace what has been destroyed in either quantity or quality. You can't beat these prairie potholes when it comes to waterfowl production and habitat for fur-bearers and upland game. It wouldn't be so bad if we could honestly claim some true conservation in this drainage program, but I don't think anyone who is sincere can, by any stretch of the imagination, say that drainage in this prairie pothole country is soil or water conservation. Some people who try desperately to defend this drainage program will grasp at the only straw. They say "When we get this pothole drained we will retire this hillside that is eroding away." We have yet to find the retired hill.

How does the SCS man from the field feel about this drainage? (Incidentally, we have a SCS man here who is a very good friend of mine, or he was before I started talking.) By and large, the SCS men in the field believe this drainage is a very stupid thing. They don't like it any better than you and I do. They are true, sincere conservationists. If you talk to one of them he gets enthused and wants to take you out to some farm where he has done a complete soil and

moisture conservation job. He isn't proud of his drainage because he doesn't believe in it, but a lot of his time and money is spent on drainage. The SCS men at the field level (and I am guessing clear up to the top) don't like this drainage program at all.

How about the farmer? Well, the farmer knows it is perfectly ridiculous, but we can't blame him for accepting payments. If you and I were walking down the street and saw a $10 bill we would pick it up. We are a little sorry for the guy who lost it but we picked it up. And if the Federal Government wants to hand out sums of money to the farmer he is going to take it.

How do conservationists feel about the drainage subsidy? We hate it bitterly, but we don't know what to do about it.

I don't like to blame the SCS or the ASC for this situation. Frankly, I don't blame them -- I pity them. It reminds me of a line from the poem Maude Muller: "And pity them both and pity us all who vainly the dreams of youth recall." And I certainly pity some of the oldtimers who were in the Soil Conservation Service when it was the truly great conservation organization in this country. They have seen this program in our section of the country degenerate from the best in soil and water conservation to one which is very largely a drainage program. This in spite of the fact that we have tremendous needs for true soil and water conservation.

Well, how did this ridiculous situation come about? It came about by a tail learning to wag a dog. The SCS and ASC were set up on a very democratic basis. You know how they establish local boards and committees. For many years that was fine. It was very democratic. Then these little boards discovered how powerful they were. They found they could tell the Federal agency what to do. Now we have a program which is financially supported by all the people but benefiting a limited number. Very frankly, I think a good deal of it is nothing more or less than a melon-cutting program.

I would like to make it clear that I am not criticizing subsidies in general and I am not naive enough to think that we are going to get rid of all subsidies. If anything in this country deserves to be subsidized it is the conservation of our soil and waters.

Another point I would like to make clear is that nothing should be done which might tend to destroy the Soil Conservation Service. This organization is staffed with some of the Nation's most competent conservationists and their services are badly needed to conserve our soil and waters. I believe they have gotten into a position from which they cannot extricate themselves without help from the outside. We should attempt to provide this help.

What's the solution to this serious wildlife conservation problem? I think two things: First, we must buy wetlands where drainage is practical - - In the deep, fertile soils of southern Minnesota, for example, where drainage can pay its own way. Incidentally, that's an interesting point. If the subsidy doesn't affect drainage, why pay one? There are a few good marshes and sloughs left in these level lands and the only way we can get them and hold them is to buy them.

The second solution is more important because it involves a much greater percentage of our waterfowl production habitat. Here the solution is to get rid of subsidies, both the technical assistance and the actual payments. We have found this is not very easy to do. The Fish and Wildlife Service has made a noble attempt to do what they can indirectly to get rid of subsidies. They have done an

excellent job trying to prevent drainage one way or another and they have saved many potholes. But still they are disappearing at the rate of 3 per cent a year. I don't think the Fish and Wildlife Service is in a position to stop these subsidies. I don't think the state agencies are in a position to stop them. They are too ingrained from top to bottom. I do not believe either state or federal activities will ever provide the complete solution. Very frankly, I think there is only one solution. I believe it has to be taken to the taxpayer. He has to be shown what a ridiculous thing he is spending his money for and how he is destroying wildlife resources at the same time. I am not going to tell anyone here how I think it should be taken to the taxper, but I have seen articles on subjects which are a good deal less spectacular than the drainage fiasco in the Saturday Evening Post.

I thank you very much, Ladies and Gentlemen.

I. T. BODE (Director, Conservation Commission, Missouri, speaking on the subject "Do We Need Zoning and Revision of Migratory Waterfowl Flyway Boundaries?"):

In view of shortness of time, I suggest that letters received from Wisconsin and Michigan in response to my inquiry (with those states' permission, of course) be incorporated in the proceedings. My reason is that these states submitted an unusually good discussion of the zoning situation, and in much more detail than I can use here. I attempted to get an expression with regard to zoning from member States and Provinces of this Association, of which there is a total of fifteen.

Five states favored zoning. This is without regard to the conditions under which zoning was favored. Opinions as to application varied.

In two states zoning was immaterial. They did not feel they had a need for it.

The reply from one state was not opposed to zoning, but expressed no need for it.

I received no replies specifically opposing zoning.

There is no question but that there is developing a definite upsurge in concern over this issue. From replies received, I tried to determine from where and why this upsurge is appearing. I conclude that there is a fundamental reason for it.

Its origin is not from those sources who usually clamor only for more kill now and be damned to the future. Consideration of the problem is coming from states who:

1. Have a reputation of being sound in their management practices;

2. Have demonstrated that they are not controlled in their management practice by pressure groups;

3. Have in the past stood firmly with the federal service in resisting zoning because of what, up to now at least, have seemed to be possible dangers to the waterfowl population;

4. Are ready to recognize a need for compensating factors under zoning to avoid over-harvest.

And why the upsurge of concern about zoning? In essence it boils down simply to this: in our management of waterfowl, we are learning the same thing most of us have learned about our own sedentary game species -- within allowable safe harvest you have to pattern the distribution of harvest opportunity to the behavior of the species under natural laws which you cannot control. Many of the states recognize this and in their own management work are regulating by zones. And mostly they are finding out that the spectre of over-harvest by reason of zoning is more of a boogy-man than it was imagined.

The flyway concept, itself, is a zoning pattern, and that pattern was based on the best information at hand at the time. We must admit, however, that part of the resulting effectuation was based on assumption and convenience of operation rather than on ecological classification and biological behavior. Hence, the use of state lines. As long as we deal with lines running north and south the problems are minimized, although even here there is present day reason to believe that these lines are not too well determined. But, when we come to the attempt to distribute harvest opportunity from north to south on the basis of lines which run east and west, we are beginning to understand that the arbitrary state line boundaries, without modification, are frequently entirely inadequate.

As a result of our own educational work, the public we deal with has developed a large measure of knowledge and appreciation of the things we have been hammering home to them about game management principles. As a result, they are in a much more enlightened and powerful position to sit in judgement on any tendencies for game managers to sit adamantly on arbitrary conclusions which are difficult to justify scientifically. If we persist in not following what we preach in such cases, will the day come when an aroused public, backed by considerations which everyone must admit are scientifically sound, will take the whole matter out of our hands, kick over the traces and revert to the old system of regulation by the group that can exert the greatest pressure?

In voicing these opinions I may be accused of fence jumping, because Missouri, the same as many other states, has argued sincerely and long with her own groups to present the problems and dangers involved in zoning and has held against it. At the same time, we have admitted very frankly that there occur situations, one of which we have in Missouri, where, if you get beyond the realm of practical law enforcement, you have very little to stand on. As long as the problem of enforcing regulations was considered paramount and as long as the federal agencies stood on the same ground we did, we were able to weather the storm. But now that the federal agency has recognized the need for adjustment in zone lines in other cases in order to handle particular management problems arising out of uncontrollable behavior of natural species, the rug has been pulled out from under us in the arguments we formerly were able to make stand up.

In my opinion, sound management in the future is going to demand a re-study of zone boundaries, and in any consideration of this problem certain truths, experiences and realities must be kept in mind. Here are some of them:

1. The problem of enforcement is just about the same, whether the zone line exists at a state boundary or elsewhere. This has reference, of course, to migratory species principally.

2. Zoning can get out of hand, and therefore it must be restricted to well-defined areas of ecological or biological significance. All concerned must have courage enough to determine zones on this basis and to resist the pressure that is sure to come from those who want many zones simply

to facilitate the kill as the flight moves through the country.

3. Zoning can mean too great a kill, although there is evidence in the experience of a number of states, with their own species, that this danger may be far over-weighted.

4. Need for zoning has become acute with the advent of shorter seasons. The short season simply cannot be stretched far enough, and the split season is not a solution. In fact, an attempt to handle the problem by application of the split season, in many cases, would create another worse problem. There is evidence that under certain conditions zoning might not result in as heavy pressure as the split season does, because of the likelihood of overlapping zone dates resulting in fewer total shooting days for a state than with the split season.

5. Under present conditions of population, the privilege of zoning no doubt should carry with it a compensating factor against the danger of over-harvest, but this must be kept within the bounds of reason and cannot be set so severe as to nullify the purpose of zoning.

   The sentiment I have been able to gather is that, with the take and possession limits as low as they are now, any such compensation would best be in the form of fewer shooting days.

In conclusion, I have faith that zoning need not spell faster or more certain doom to our waterfowl populations and that we should re-study the problem without any precedent-dictated bias.

C O P Y

Wisconsin Conservation Department
Madison 1

COMMENTS REGARDING ZONING WISCONSIN FOR THE WATERFOWL HUNTING SEASON

Prepared by L. Jahn and C. Kabat for the Mississippi Flyway Council 1955

The numbers preceding the comments refer to the numbers of the queztions on the "Questionnaire on Zoning in the Mississippi Flyway" (see attached form).

General Comment

At the present time, there are more species of waterfowl that are either just holding their own or declining than than there are species showing an increase. Therefore, if zoning will result in an increase in the kill beyond that allowed by the present type of seasons, it should not be attempted until there is a measurable increase in the size of the current breeding population (that is, the average size of the breeding population for the past five years).

It must also be realized that until zoning is tried in the Mississippi Flyway, we will not know the degree to which the total harvest will be affected. It is apparent that if states are allowed to exert greater hunting pressure on that part of the waterfowl population that winters in their area, the total flyway kill will increase proportionately. Conversely, if the kill of birds is increased on the breeding grounds the total flyway kill will be augmented accordingly. Further,

if the present hunting seasons in most of the states are timed to occur when most of the waterfowl are within their boundaries, the total flyway kill will increase proportionately to any liberilization of the presently allowed seasons.

In the northern states of the flyway, it is doubtful that the kill will be increased significantly (if at all) under average autumm conditions because: (1) Waterfowl species, with but a few exceptions, are adaptable enough to take advantage of developed and natural refuge conditions to protect themselves against excessive kill, (2) Daily weather conditions can influence the migration and kill in any season regardless of length and type, and (3) Freeze-up of waters occurs annually in Canada and northern United States before the allowed season ends.

Since the daily weather conditions and the time of freeze-up vary from year to year, it would be advisable to base an evaluation of zoning on a two or three year trial period if and when it is allowed. It is further recommended that zoning be permitted only on an experimental basis if and when the population status permits.

One major obstacle stands in the way of zoning. This is the availability of an accurate kill census technique. Before zoning is allowed, each state through its own efforts or through the U. S. Fish and Wildlife Service will have to employ a kill census technique that is reliable enough to detect any increase in kill that might result from zoning. Until the Service and the Flyway Councils decide that such techniques are known and being used, zoning seems to be impractical. However, the present techniques do permit the detection of relatively large changes in kill. Thus, large increases in the Mississippi Flyway waterfowl population would permit at least an experimental type of zoning without more refined kill census techniques.

1. Since the calendar dates within which the U. S. Fish and Wildlife Service allows states of the Mississippi Flyway to select their hunting season dates are from October 1 to January 10, on the average, and referring to the entire state, Wisconsin generally has about 45 days (October 1 to November 15) of open water. Forested northern Wisconsin usually experiences a temporary freeze in late October which forces puddle ducks south. Diving ducks have largely departed by November 15, with only small groups remaining on a few large deep lakes. An early October opening for northern Wisconsin is recommended.

   Agricultural southern Wisconsin, where the bulk of the waterfowl concentrate, has the same 45-day period (October 1 - November 15) of open water as northern Wisconsin. However, the first temporary freeze-up usually doesn't occur until in early November. Stubbling puddle ducks and geese remain in many areas until complete freeze-up, utilizing available feed in agricultural fields after water areas are ringed with ice. Furthermore, realizing that from 30 to 70 per cent of the total hunting season harvest occurs on opening week end (day and one-half), a good distribution of the kill can be provided by opening in mid-October. Stubbling mallards, black ducks, pintails, and Canada geese develop feeding flights off of big lakes and out from established refuge areas during the first 12-15 days of October. Therefore, hunters would not have to concentrate around a limited number of water areas as they do when the birds are ringed in by early October shooting.

   By opening in mid-October, a concurrent opening date can be had with ruffed grouse and the ring-necked pheasant. This feature is becoming increasingly im-

portant as agricultural, industrial, and private expansions continue to reduce our wetland resource in this part of the state. Furthermore, on some areas, such as parts of the Mississippi River, Turtle Creek and a few deep lakes, which remain open slightly longer than the rest of the state due to their physical features, good shooting can be experienced up to Thanksgiving Day by a limited number of interested hunters.

The bulk of wetlands of the type which waterfowl use for breeding are located south of the proposed zone line. A mid-October opening would best protect our local breeders and at the same time help increase the breeding waterfowl using this region. A limited area in the northeastern part of the state would have a problem resulting from separate openings on waterfowl and pheasant. This, however, is a local problem.

A mid-October opening for southern Wisconsin is recommended.

2. See comments on other questions.

3. Some states of this Flyway should definitely be permitted to zone on an experimental basis when the waterfowl population status indicates that it could stand a possible increased kill. California has zoned and apparently learned that the harvest isn't excessive and also that in addition to zoning, for some species, they needed late winter (up to mid-March) shooting to help control crop depredations.

4. It is very probable that the duck and coot kill would <u>not</u> increase in Wisconsin. The goose kill will undoubtedly be increased, but probably only slightly. The total estimated waterfowl kill in Wisconsin has varied from 462,281 to 1,448,943 between 1931 and 1954 with continuous seasons varying in length from 30 to 80 days. The largest kills occurred in 45-day seasons without rest days.

5. Using the past three (1952-54) 55-day continuous Wisconsin seasons as a base for comparative purposes, it is questionable if the total waterfowl kill would be measurably greater in Wisconsin under average weather and hunting conditions, with a zone type season. From the attached graph, it is obvious that only a general relationship between season length and duck and coot kill exists.

In Wisconsin, the bulk of the waterfowl are here from October 12 to November 12. The total harvest depends upon the weather: (1) amount of rainfall occurring in the three states northwest of us (Minnesota, North Dakota, South Dakota) in fall and early summer, (2) daily conditions during the open hunting period, and (3) time of freeze-up in Canada and in Wisconsin. The season of 1938, when Wisconsin experienced tremendous fall rains and the three states to the northwest of us were relatively "dry," still stands as the most successful waterfowl hunting season experienced by Wisconsin hunters. The 1938 season was an exception. A series of natural events, all uncontrollable by man, occurred in the correct pattern to provide the highest duck kill in Wisconsin's recorded history (1929-1954). In 1938, the season opened October 1 and closed November 14, giving a 45-day season. Waterfowl bagged in seasons of 50 to 80 days length since 1938 have not resulted in larger seasonal harvests.

The reason for presenting this information together with the map and graph is to point out that even with the continuous season of the <u>same</u> length, a

variation of 50% and more in the total harvest takes place. Realizing this, it is believed the zone type season could be tried, not for one year but for at least a period of three years when the population status indicates that it would be safe. Serious declines in the breeding population could be detected with the present surveys.

6., 7., & 8. If the same penalty is not imposed on all states in the Flyway, some standard method for setting an equitable differential penalty would be necessary. At present, a hunting season of a given length must be established between October 1 and January 10 for all states of the Mississippi Flyway. Northern states are already limited in the number of days of shooting by freeze-up. The balance of the states of the Flyway accommodate the waterfowl for the winter. Possibly, if a penalty is necessary it could be imposed on the northern states on the basis of the number of days from October 1 to the average freeze-up date (as determined from climatological records). In southern states the penalty might be based on the total number of days allowed for the season by the U. S. Fish and Wildlife Service in relation to the number of days the waterfowl are within their boundaries.

9. See map.

C O P Y

STATE OF MICHIGAN

DEPARTMENT OF CONSERVATION

LANSING 26

Gerald E. Eddy, Director

June 13, 1955

Mr. I. T. Bode, Director
Missouri Conservation Commission
Monroe Building
Jefferson City, Missouri

Dear I. T.:

This is in reply to your letter of May 17th requesting information and a statement of our views regarding zoning for waterfowl hunting in Michigan. As you may know, Michigan has, in the past, requested the opportunity to have separate seasons on waterfowl for each peninsula, such seasons to open simultaneously with upland game seasons. We are of the opinion that Michigan can present a strong case for such zoning when the waterfowl seasons are short.

The two peninsulas are distinct geographical units and have marked climatic differences. Wildfowling opportunities and hunting pressures in the peninsulas are also distinctly different. Hunting regulations for other small game species in Michigan are established with separate seasons on the basis of the climatic and georgraphical differences within the state which encourage the public to ask to have zoning for waterfowl. Better opportunities to have concurrent opening of waterfowl and upland game seasons would be possible if zoning were permitted. The concurrent opening of seasons divides the hunters between the forest uplands, the

farmlands, and the marshes, resulting in a marked decrease in gunning pressure for each type of habitat. Hunting not only is more enjoyable because of less competition for favored waterfowl hunting sites, but with divided gun pressure, the initial kill of any one game species is lessened.

The split season provision offered the states in the Mississippi Flyway in past years is not applicable to conditions that exist in Michigan, as the non-hunting period that must be accepted under this provision occurs at the time of peak abundance of waterfowl generally in the state. Zoning differs in that it permits an over-lap in seasons so that hunting may be permitted to meet the periods of maximum waterfowl abundance in each part of the state and is therefore more applicable as an alternate provision. For this reason, we are of the opinion that zoning with the penalty clause might in some years be more acceptable than straight seasons.

In order to direct further discussions on this subject, we will follow the specific questions presented in your letter.

NEED FOR ZONING

The need for zoning is inversely proportional to the length of the gunning period. With a short gunning period the need is greatest as it is most difficult to achieve an equitable distribution of hunting opportunities for sportsmen in all sections of the state.

With a 55-day continuous season, or longer, Michigan can obtain a fairly good spread of hunting opportunities in all parts of the state. On the other hand, with a 45-day or less continuous gunning period, we believe it may be worthwhile to consider zoning. We must add that there are public demands for zoning from the hunters in Michigan. These demands are mainly from sportsmen living in the northern or southern extremities of the state. In actual application, however, it is questionable whether Michigan would be justified in asking for zoning even with a penalty clause except in years when only a relatively short gunning period is allowed.

ANTICIPATED PROBLEMS

We do not anticipate any serious or potential problems within the state that may result from zoning except in finding and defending an acceptable formula for penalties. Zoning in some form has been applied to our upland game regulations for many years and it is generally acceptable to the public.

Opportunities to hunt waterfowl in the northern part of Michigan are widespread but lean and the distance from large population centers is so great that we would anticipate only minor shifts in hunters if zoning were applied. The greatest problem appears to be in obtaining a low enough penalty to justify the acceptance of the zoning provision if it were offered.

INCREASE IN KILL DUE TO ZONING

Because of the conditions as stated above, we anticipate the increase in kill that may result from zoning without a reduction of days in each zone to be approximately 5%, certainly not to exceed 10% of the present average annual harvest. A tabulation of hunters' compulsory reports shows that only 7.5% of our duck hunters hunt in the Upper Peninsula. This is based on 14 years of record.

A check of duck stamp sales in 1951 and 1952 also shows low numbers of duck hunters in the Upper Peninsula. Only 6.4% and 6.1% of the stamps sold in Michigan in those years were purchased in the Upper Peninsula.

Even though there is a great difference in hunting pressures between the peninsulas, we do not expect movements from southern Michigan into the northern peninsula. An example of hunter shift due to zoning is illustrated by the number of grouse hunters that cross the Straits to take advantage of the 15-day earlier upland game season in the Upper Peninsula. Hunters' reports show that in 1948 only 18.7% of the grouse hunters who reported hunting in the Upper Peninsula actually resided in the Lower Peninsula. This occurred during a year in which we had a fair grouse population and extensive areas of publicly owned grouse habitat were available.

Another comparative example was obtained in 1950. In that year Michigan opened the waterfowl season in the Lower Peninsula two days after the opening date in the Upper Peninsula by shortening the Federal season in the Lower Peninsula by that much. This came about from the Commission's desire to test a management measure and have the waterfowl season and small game seasons (grouse, pheasants, rabbits, squirrels) open concurrently in the Lower Peninsula where hunting pressure is heavy. This earlier opening of the waterfowl season in the Upper Peninsula indicates what might be expected in shifts of hunters if the proposed zoning for waterfowl seasons were tried. Examination of the 1950 hunters' compulsory reports show that only 1.1 per cent of the state's wildfowlers lived in the Lower Peninsula and reported hunting in the Upper Peninsula.

This would indicate that Michigan can expect only minor shifts of duck hunters if the state were zoned.

Using a 55-day continuous season as a base measure against two zones with 45 days each, we are of the opinion that the total kill of ducks would change very little. The major difference would be a change in the species harvested. Fewer blue-winged teal, pintail, and wood ducks would be taken, with an increase in the take of diving species.

Zoning would provide for later shooting only in the southern third of the state as ice conditions force birds to leave the Upper Peninsula around November 1, the northern part of the Lower Peninsula around November 12. Having the gunning period continue into December would have no advantages for two-thirds of the state.

In the southern part of the Lower Peninsula where most hunters live, waterfowl are present in numbers from October 1 to December 5. The big lakes are ice-free for that entire period and may be hunted. It doesn't make much difference whether the more limited number of shooting days under zoning are scheduled to include the fore part or the latter part of this period, the kill will remain about the same. Because of this, and since no major shifts in hunting pressure are expected there is little chance of increasing our total kill by zoning.

For many years our deer seasons have opened on November 15 and extended to the end of the month. Preparations for travel to the North and actual deer hunting and colder weather divert a large segment of hunters from duck shooting after Nov. 10.

OTHER REMARKS

In considering the zoning provision for the Mississippi Flyway, it is obvious that a uniform zoning penalty for all states in the Flyway would be unjust.

In some states, zoning would provide for a larger harvest; in others there would be little change. Since the effects of zoning are so highly variable, it

appears necessary to work out a satisfactory formula to keep the kill of each state fairly near what it has been. No one has been able to present a formula that is generally acceptable. In fact, whether this is possible, still may be questionable.

We should not overlook the problem that may result even though adjustments are permitted at the state level, as there appears to be every possible chance for much new bickering among states and additional squabbling among sportsmen. This proposed system of adjustments at the state level for zoning necessitates a decision as to fundamental objectives. Is the intention to maintain essentially the status quo in the annual kill by states as it has averaged under past regulations, or is it planned to apportion the kill more evenly, so that waterfowlers in all states tend to average the same annual kill per man?

This question demands considerable thought. I am certain that a summary should promote a good deal of discussion at the meeting.

Very truly yours,

/s/ H. D. Ruhl

H. D. Ruhl
Chief, Game Division

BRUCE F. STILES (Director, Iowa Conservation Commission, speaking on the subject "The Prairie Chicken Project" under the general subject of "Restoration of Declining Species, Management of Exotics and Importation Problems"):

Mr. Chairman and Members of the Association: It was my understanding that I was to give you a brief resume of the National Prairie Chicken Project that was initiated by the Wildlife Management Institute. A week ago today I was reading in the Des Moines Register under a Canadian date line an article stating our whooping crane population had increased by four. I believe it was in the nesting grounds near Ft. Smith they had brought up four young, which, of course, was very pleasing to all the people interested in some of the remnant species -- those that are diminishing. There are 21 whooping cranes left in the world. Not too long ago, probably about 1935, I believe the Fish and Wildlife Service announced the trumpeter swan population was down to 52 individuals. I believe now that has been increased to some 600 or 700 individuals. Whether we can save those two populations is still problematical.

The status of the prairie chicken is not anywhere near as acute as those two species, but it is still a dangerous species. We have in the last 100 years lost many valuable species. The great auk, the labrador duck have passed out of the picture somewhere back in the sixties. The Eskimo curlew, I believe the last record was about 1912, while the last records of the passenger pigeon were along around 1897 and 1898. The last individual died in a Cincinnati zoo in 1913. They lost the Carolina parakeet. The last Heath Hen died in Martha's Vineyard in 1931. So I believe it is of great importance that we make every possible effort to save any of our remaining endangered species. In a speech before Congress in 1953, Dwight Griswold of Nebraska, made a statement it was estimated that there were only between 350,000 and 400,000 prairie chickens left alive anywhere. Even as recently, I believe, as 1946, the State of Minnesota had an open season and shot 58,000 prairie chickens. At the present time, I don't believe there are over five or six states where the administrators believe there are enough prairie

chickens to allow an open season. It is timely, I am sure, that this National Committee on Prairie Chicken has been organized. Bob Brown from St. Joe, a former member of the Missouri Conservation Commission, is Chairman of that committee. They have held about five meetings. The last one was held in connection with the North American meeting at Montreal. Probably many of you attended. They are now putting out a publication, I don't know how often it's published, called "Notes from the Booming Grounds." I think the formation of that committee brought to the attention of many states the serious status that the chicken occupies at the present time. I was interested in noting reports from some of those states. I believe Bud Morgan reported in North Dakota the greater prairie chicken was almost non-existent. Missouri in their studies in 1940 reported populations of about 15,000 chickens, though they currently have only about 6000 left. Illinois has a program now of trapping live chickens in Nebraska in cooperation with Nebraska and transplanting them in Illinois. Malaher from Manitoba reported they had at least one major area they thought suitable for chicken, and I believe they are negotiating with some of the states that have chickens in an effort to plant them to see if they can have any success. Iowa had fairly decent wintering populations up to about 10 years ago. There were flocks of 50 to 150 coming into northwestern Iowa. I haven't seen any wintering chickens in at least seven or eight years. We had nesting chickens up to two years ago in southern Iowa in part of the range that extended up from Missouri, but we have had no record of nesting in that area for two years. We had the establishment of a grassland area -- We bought 250 acres in Howard County in Iowa -- native grass that hadn't been plowed. We had a record of one nesting chicken about five years ago. We had another -- 160 acres in Pochohantes County. There is still the possibility of getting some nesting birds there. However, I seriously question if the area is big enough. One of the important things that came out of the Montreal meeting was the appointment of a committee to see what could be done in establishing a national grasslands monument. I have not seen the membership of that committee. I believe it is important. The Fish and Wildlife Service stated their interest and willingness to cooperate. I feel it will be a very important thing to establish a large national grasslands monument. Wisconsin has shown a great deal of interest in the rehabilitation of the prairie chicken in the work Hammerstrom did, and the plan was to set up isolated grassland forties. I don't know the situation -- There was a lot of resistence to that. I believe a public hearing was to be held in February on that, but there was so much resistence it was postponed. The last I heard, Voigt intended to go ahead with it. That about concludes my resume on the prairie chicken.

About a month ago I attended an Izaak Walton League meeting in Des Moines, and the public relations man from the Maytag Washing Machine Company was there. He said he met a friend of his who stuttered. He said to the man, "I understand you have been away to a school for stutterers. Did you learn anything there?" The man said, "Yes. I learned to say 'The quick brown fox jumped over the mulberry bush,' but it's damn seldom that fits into the conversation."

I don't know where this story fits in on prairie chicken talk, but thank you very much.

M. O. STEEN (Director of Fish and Game, Missouri Conservation Department, speaking on "The San Juan Rabbit"):

The subject, of course, is the San Juan rabbit. If rabbits have any outstanding characteristics, one certainly is their high reproduction potential; a characteristic that has been the butt of many jokes. This factor is important to us in

two ways -- important if the particular species happens to be a valuable game animal and important also if it has potentials for harm, particularly the destruction of agricultural crops.

There is a good deal of controversy about the San Juan rabbit; a difference of opinion exists. Therefore, it might be well to talk briefly about this species -- to talk first about the animal itself and second about its history and record.

The San Juan rabbit is a variation, I should say, of the wild European rabbit, an animal known scientifically as Oryctolagus Cuniculus. That animal is the ancestor of all domesticated breeds of rabbit, the forms we raise for fur and food. I don't recall exactly how many domesticated variations there are that we have developed by selective breeding in captivity -- about 128 altogether comes to mind.

The San Juan Islands are a group in Puget Sound in Washington. About 60 years ago, or shortly thereafter, the European rabbit in the original wild form, and subsequently in the domesticated variations of that form, were released on these islands. These releases established themselves there in substantial numbers, substantial enough so that San Juan rabbits are now harvested and sold as meat or exported to other states as breeding stock or for release to the wild under the concept that they will become valuable game animals that will supplement the supply of cottontails.

The San Juan rabbit, in his present form, resembles quite closely the original wild European rabbit, although there are evidences of the introduction of domesticated strains. This does not, in my opinion, obviate the hazard involved in the release of the San Juan rabbit on the American mainland.

I would like to make it clear here that we are talking about one animal, whether it be modified by domesticated variations or is the original wild animal. We are talking about one genus and one species. The domesticated variations are only strains developed by selective breeding in captivity. It is not only possible but probable that this process will be reversed by natural selection in the wild.

What is the history of this animal? The European rabbit was first introduced into England in the British Isles in the 12th Century. It spread all over England, Scotland and Wales. It has a 700-year record in the British Isles as one of the worst pests in that country, second only to mice and rats in his destructive activities. In the British Isles, farmers suffer an annual loss of 125 to 150 million dollars due to the destruction wrought by the European rabbit. That, in spite of the fact that the British Isles are as well populated as any part of the United States, with a lot of hunters and heavy hunting, and in spite of the fact that the British have also tried to control this rabbit with the use of traps, ferrets, gas and about anything they could think of to use as control measures. So, if any of you think that because you live in a populous state that your hunters are going to be able to control this animal and really keep him in check you might look at the 700-year experience of the British Isles in this respect.

The European rabbit is the destructive animal you hear so much about from Australia. This species has succeeded there beyond the wildest of dreams and damage has been staggering. The European rabbit is living very successfully in New Zealand. This species thrives on the bleak island of Tierra del Fuego, and within two hundred miles of the Equator in Africa. We have no reason to assume he will not live successfully in these United States. It is my humble opinion

that the European rabbit can succeed, and that once established, the potential for very serious trouble is high almost anywhere in the United States. The only exceptions probably would be the deserts, high mountains and other areas that might be so marginal that the species couldn't succeed there.

Much has been made of the fact that this particular animal, the San Juan rabbit, is not the same animal as the wild European rabbit. I remind you of what I said previously, that for all practical purposes, they are the same animal. I remind you also that the fact that we have developed variations by selective breeding in captivity is no guarantee that we have made an angel out of a revolving rascal. (A revolving rascal is a rascal any way you look at it.) It is even possible that genetic characteristics bred into domestic strains could eventually result in greater pest characteristics through adaptation in the wild.

Summing everything up -- We are talking here about an animal that has a proven history as the worst pest of any mammal that man has ever intentionally transplanted in all of recorded history! For us, as wildlife managers to participate in or even permit the introduction of such an animal into the mainland of the United States is certainly foolhardy. It is, in my humble opinion, a dereliction in duty. We are morally and officially obliged to do something about the San Juan rabbit in the United States, and about other animals of like nature. There is a great deficiency in our control of such introductions. There is a lack of adequate laws and of policing introductions in most states. We have been very fortunate in the United States up to the present time with respect to the introduction of undesirable species. However, we have been fortunate only because the gods willed it that way, and not because we have been careful. We are now faced with a serious problem, a real threat in the San Juan rabbit, and it is high time we did something about it individually and collectively.

L. P. VOIGT (Director, Wisconsin Conservation Department speaking on the subject "Developing New Pheasant Strains"):

This problem that we have in developing new pheasant strains in Wisconsin is one we don't claim to have any of the final answers on. It's one we have been giving a great deal of thought to because of our diminishing pheasant range and because of our increasing population pressures, including the hunters of pheasants. With that, I would like to present this material we have prepared.

Before describing this state's breeding project it is necessary to have some basic understanding of the pheasant range and the current stocking program. Wisconsin's pheasant range is limited by glaciation effects, soil type, a dairy economy and climate. The best pheasant range is limited to the agricultural areas of the state located in the southeastern quarter of the state. Marginal range extends around the state in the form of a horseshoe along the eastern and western boundaries. The estimated harvest of cock pheasants ranged from 300,000 to 800,000 during the past 15 years. In recent years it has varied between 400,000 and 500,000. Only cocks are legal game.

A minimum of 10-20 per cent of the cocks killed annually in this entire state are young artificially propagated cocks released each year. In several marginal counties where the wild population is relatively low, the kill consisted of from 40-64 per cent of game farm reared cocks. In the best pheasant range where wild populations are relatively high, the stocked birds make up 5-10 per cent of the annual kill.

Wisconsin harvests its cocked birds as, or more efficiently, than any other

state in the country. Approximately 85 per cent of the fall cock population is harvested annually. An evaluation is being made of the contribution of the 100,000 hens stocked each year.

Because both artificially propagated and wild established pheasants in Wisconsin prefer intensively farmed areas with a flat terrain, Wisconsin's better pheasant range is restricted. Within the better pheasant range there are many acres of wooded swampland and hills. The dairy economy of the state results in a land use program that restricts the potential of the better pheasant range.

Although Wisconsin has a large scale habitat improvement program, we believe that with human populations increasing at a tremendous rate it is necessary to exploit all possibilities of producing a pheasant that will be more adaptable to extremes in habitat condition. Specifically, we seek, through a process of crossing different species and selecting for special characteristics, to obtain a bird that will utilize wooded areas for nesting and possibly even be able to digest cellulose to a limited extent. Wisconsin still has an abundance of grazed and ungrazed woodlots. Many of these woodlots are located in the marginal pheasant range but a considerable number are interspersed in the best range. For example, lying within the best pheasant range in the southeastern part of the state is a large acreage of Kettle Morraine wooded swampland which currently has a low pheasant density.

The characteristics of pheasants that form the basis for the breeding project are:

1. Fertility (87-93%)
2. Hatchability (80-85%)
3. Livability of chicks (90-95%)
4. Feathering and/or chick down
5. Hardiness
6. Wariness
7. Broodiness
8. Weight gain
9. Retaining desirable charaateristics after crossing and inbreeding.
10. Disease resistance
11. Nesting in woodlands
12. Date of nesting
13. Eating and assimilating low quality feed
14. Increasing the adaptation response mechanism.

It will be difficult to improve on such factors as fertility, hatchability, livability and weight gain. Game farm birds now utilized in the propagation program rate high in these characteristics (see the preceding percentages).

The following species and hybrids that have been used in the program to date are: Chinese, Mongolians, Blacknecks, Formosans, Mutants, wild ringnecks from areas where little or no artificially propogated birds have been released from ten or more years and from areas where game farm birds were stocked annually, Hawaiian ring-necks (imported), Versicolor (our own game farm stock and recent imports from Japan) and game farm ring-necks which are mainly Chinese and Mongolian Hybrids.

During the first five years of the project's existence the work was concentrated along three approaches: (1) Individuals of all the different species were inbred to obtain homogeniety, (2) Different species were crossed and back crossed in all possible combinations, and (3) Intensified two-way crosses were made. Some selection was made of superior birds in all three approaches. All three approaches were conducted simultaneously. Within the last two years some of the inbred birds with the most desirable characteristics were worked into the multiple crossing approach.

A fourth approach was added in 1954. Intestinal flora studies were begun to determine whether certain individuals had intestinal microorganism populations that would make it possible to assimilate natural foods that otherwise have been found to be low in nutritional value for pheasants. These natural foods might include berries, buds, stems of plants and leaves that have been found to sustain grouse but not pheasants to date. This fourth approach is still in the exploratory stages but some interesting developments have been made.

A considerable amount of information was obtained on the inheritance of various characteristics. As would be expected, birds with dominant desirable characteristics were selected for crossing purposes. There was little difficulty encountered in getting fertile hybrids from the crossing of any of the species listed previously. In some cases such factors as fertility and hatchability were greatly increased by making reciprocal crosses. For example, the progeny of a Mongolian cock and a Formosan hen might have low fertility in the second generation. When a reciprocal cross of a Mongolian hen and Formosan cock is made the progeny show higher fertility in the second generation.

Two species that have shown considerable promise in transmitting desirable characteristics to their progeny when crossed are the Mongolian and Versicolor pheasant. The characteristics of each, and of the cross appear as follows:

Versicolor	Mongolian	Cross (Mongolian x Versicolor)
Extreme wildness	Comparatively non-wild	Extremely wild
Lays large clutches	Many hens prefer only 6 to 8 eggs	Large clutches
Not so winter-hardy	Very winter hardy	Hardy
Very late layer & brooder	Relatively early layer	Very late layer & brooder
Small in size	Large in size	Intermediate (as Chinese Ringnecks)
Most prefer dense nesting cover	Most are open-nesters	Most prefer dense areas
Small eggs	Large eggs	Small-medium eggs
Easily affected by gapeworm	Easily affected by gapeworm	The least affected by gapeworm of all the pheasants

The Mongolian-Versicolor cross appears to have many of the characteristics of a hybrid that would be more adaptable for regions containing wooded areas. Our own Versicolor stock was found to have too many lethal characteristics hence we were forced to import birds from Japan. The progeny of the recent imports obtained from 1955 matings appear to be superior to our own stock.

Another hybrid that shows a considerable amount of promise is a multiple cross of Versicolor, Chinese, Mongolian, Mutant and regular ring-necked game farm pheasants. Progeny of the Versicolor x Mongolian and multiple cross groups have been released in small numbers in the fields and hunter checks in these areas showed that these birds were surviving well from the release date in August to the hunting season in mid October.

Two methods have been used to date to measure superiority along with observations on desirable characteristics on the penned birds. First, the progeny of crosses considered as having shown superiority have been exposed to the stress of starvation. The length of survival and weight loss during standard periods of time are recorded and comparison made between groups of birds and individuals. Secondly, and as mentioned above, the progeny of selected matings are banded and released in the wild. Hunter returns and trapping programs are used to get data on survival.

The examination of intestinal flora and physiological examinations such as adrenal organ (the organ believed to be highly involved in stress adaptation) output are being tested as short cut methods for determining superiority.

We have no illusions that we will revolutionize the pheasant management programs of the world. We are certain, however, that the approaches used and the philosophy on which our breeding project is based are sound. Domestic animal and plant breeders have developed revolutionary hybrids and strains. With all of the scientific knowledge developed in other fields at our disposal, we cannot fail to be able to at least determine what the possibilities are for producing a more adaptable pheasant for Wisconsin. We have no fear that natural selection in the wild will eliminate the desirable characteristics we have combined in pen experiments. Dominant characteristics will prevail whether we want them to or not. Our job is to breed the desirable dominant characteristics of many strains, species and individuals into a superior progeny.

A considerable number of desirable progeny will be available for release in wild study areas in 1956, providing we do not lose many breeders through accidents in the interim.

HARRY LUTZ (Publicity Director, Forestry, Fish and Game Commission, Kansas, speaking on the subject "Utilizing TV Exhibits and Other Public Information Aids" under the general subject of "Improving Public Relations"):

GENTLEMEN: When Charles Dambach first wrote me about taking part on this panel discussion, he suggested the topic or so had it written: "Utilization of Television, (comma) Exhibits and Other Public Information Aids." When I received a copy of the program from Tom Kimball, I noted the subject was listed as "Utilizing Television Exhibits and Other Public Information Aids." I think you can see there is quite a difference in the two.

Whatever the subject that was intended, our time is short so I think I had best wade right into the subject, as I look at it--television, be it alone or television exhibits.

I am quite sure that all of us here realize the importance of utilizing television in the fish and game, wildlife or conservation field. There is no doubt in my mind but what we, in the fish and game field, have a product that we can easily and effectively demonstrate on the television screen. I know of no field that offers such a wealth of worthwhile subjects for television showing. Television affords an opportunity to carry the theme of conservation, wise use of our wildlife resources and fish and game matters to many, many people who are not reached effectively by other media.

But it isn't all as simple as it sounds. There are many problems connected with utilization of television.

First of all, I think we need to bear in mind that television is expensive. The utilization of television will therefore vary greatly, depending first of all on finances and second, on how strong or how favorable your commission or director looks on the value of television.

Therefore, before undertaking any television program, we need to make sure of at least three things:

1. Your director is sold on the project.
2. That you have someone with as much television experience as possible, available to direct the program. In other words, that you have adequate and competent personnel.
3. That some kind of a budget is provided.

In utilizing television or planning any TV program, there are also a few pertinent questions to be answered.

Number 1 -- What is to be the purpose of the program? That is not as simple to answer as it may seem. For circumstances vary greatly in the various states. Each individual state's problems should definitely determine the emphasis placed on subject matter covered by each program.

Should we stress general conservation, lean more to natural history, game and fish management, conservation education, law enforcement or offer an almost endless supply of subject material? It seems to me we should use some of each, depending, as I say, on our own individual problems within our state. But we must keep the program diversified.

It might be interesting to some of you to give you some results of a survey taken in January of 1954 on use of television by various state fish and game or conservation departments:

Only 10 states at that time were engaged in definite planned television programs. Those states were: Iowa, Kentucky, Louisiana, Michigan, Missouri, New York, North Dakota, Oklahoma, South Carolina and Tennessee.

Seventeen states and one from Province of Ontario, Canada, were classified as using television on an incidental basis.

Six states reported no use of television but were planning to do so, and five states reported no use of TV and no plans to do so.

The approaches which different states make to television vary greatly. Some use live programs with animals; some use exhibit type programs; others use life histories of birds and animals, and films, with most states using the latter. That brings us to question number two.

Number 2 -- How many movies should be considered for television use? Here I think it would be generally agreed that the minimum number should be thirteen. Station programming is based on quarter-year periods and in order for a station to schedule the show regularly in good time it must be guaranteed at least a full quarter-year program.

Other questions that should be answered when talking about utilizing television are these:

How many people should be assigned to television production? That answer would depend entirely upon finances and personnel limits of each state.

What equipment is necessary for good production? Here again the money or budget is the ruling factor. Naturally, it would vary greatly in each state. I do think, however, there is certain basic equipment necessary such as good cameras, magnetic sound equipment, a well-equipped editing studio, projector, amplifier, etc.

One of the biggest problems, particularly with us in Kansas, is getting TV stations to run our programs at a good time. All class A time seems to have been sold to paying customers; consequently what films or programs we have been able to get shown have been put on at a time that isn't too good. At the present time we have only seven stations operating in the state and up to now there are plenty of agencies, public and private, competing for the available time of public service programs. Our stations have welcomed use of our films and live telecasts but want to run them during the morning or early afternoon hours.

I suppose the better the material, the better a station will welcome it and give it better showing time.

I think too that possibly we should give greater thought and time in exploring or seeking outlets and agencies that would sponsor our type of programs. In other words we should mobilize all outside agencies in support of our programs, particularly if they are slanted toward conservation education. Many advertising companies and industrial firms can and will lend a hand if we can sell them on the idea.

I see time is running out but I did want to say a word or two about exhibits and by that I mean traveling wildlife exhibits. Attitudes toward this type of exhibit varies widely among personnel of the different states. Cost and administrative work required for the operation of such an exhibit are two of the main factors to consider.

In Kansas, we have found great interest in our live exhibit (fish and game birds) at county fairs. We just purchased the exhibit trailer and tractor that the Oklahoma Game and Fish Department had, and we plan to put it on the road to schools and to show at more county fairs. I cannot help but think it will be worth all the expense but only time will tell.

Now, I see it is time to turn the time over to Bud Morgan and his topic on this discussion period.

H. R. MORGAN (Commissioner, North Dakota Game and Fish Department, speaking on the subject "Use of Department Publications as a Medium for Propaganda"):

Mr. Chairman and Members of the Midwest Association: I think the term was "propaganda" -- how to properly propagandize the public to the acceptance of the program.

I think those of us who have worked in this field realize the responsibility that we have of breaking down resistance for some of the things you and I believe are a true philosophy of management in the minds of the public. We, of course, use TV there. We use radio to a large extent, and I feel we get to almost everybody through the use of those two mediums. However, we have certain classes of individuals who are interested in going more into the details of management than

are those that comprise the radio audiences, and, as a consequence, we are using several ways of getting to those people.

I think I can say that in North Dakota we feel that our big problem is that of teaching true philosophies of management. I think probably most of our publications have pointed in that direction. One thing I would like to say before going into the enumeration of the various types of publications. Recently we set up a steering committee for all publications, comprised of the Director, the Assistant Director, the Administrative Assistant and Chiefs of the six divisions of the Department. We sit down quarterly and try to plan our programs for the monthly publication that deals more specifically with various phases of management, we plan the program for the bi-weekly news release, which is more current and probably a little more newsy, telling the people where they can find good hunting, where the fishing is good -- things of that sort. Then recently we have gone into another phase of the program that we have stressed, that being trying to get the kids in schools -- college, high school and grade school. The approach there has been in several directions. Incidentally, here are copies of the monthly magazine, North Dakota Outdoors, I spoke of. One handicap is we usually had a lag between the time we get the copy to the printer and the time the copy is returned and the magazine is published. Incidentally, we had quite a lot of trouble in seeing to it that people who subscribed got the magazine regularly, and particularly, got it shortly after they subscribed. There is nothing that makes a sportsman or interested reader more antagonistic than to put in his four bits -- and incidentally a year's subscription is 50 cents, which entitles the subscriber to twelve issues -- it costs us twice as much to publish the magazine -- There is nothing that antagonizes the subscriber more than to put down his money and not get the magazine for two or three months. Originally, we had the magazine sent direct from the publisher. We would send the list of subscribers we had on a monthly basis. Usually they set that up on boiler plates, but apparently the publisher would get lazy every once in a while and use the boiler plates of a month or two previous. We bought an addressograph and now as these subscriptions come into the Department we immediately print them on the addressograph and take them to the publisher, and through the use of, I believe, a Dick Mailer they put this roll of subscribers on the machine and run the publication through, and by doing that we have complete charge of the subscriptions at all times. If the people are not getting the magazine it's our fault, and we can't put the blame on anyone else.

The second publication is the bi-weekly news release. It is a mimeographed sheet of two -- sometimes three or four -- but we try to hold it about two sheets. That is aimed at a different segment of the population. In fact, it goes into every barber shop and doctors and dentists offices, as well as libraries, public schools and wildlife clubs, of which there are somewhere from 125 to 140. We also put out a Department organ that is sent only to Department personnel. This is published on a weekly basis. It is a ditto proposition and contains current news of what is going on in the Department, and it goes only to Department personnel. We found out many of our field men were embarrassed in not knowing just what was the current program of the Department. We have our weekly Administrative Committee meetings. The staff meets once a month and we have Advisory Committee meetings once a week. Things come up at both of those meetings that people in the field should be acquainted with. There is nothing more embarrassing, I think, than to be a member of the Department and to come upon say a fish truck and a bunch of boys seining -- You stand there with your mouth open not knowing exactly what they are doing.

Getting back to our school children again, beginning last year we began to put out what we call "Wildlife Lessons." They are not complete yet by any means. They deal with each important species of game, predators and other wildlife species in the State of North Dakota. They come out in these hard-back books loose-leaf so that as lessons come out they can be added. We got the covers without costing us anything. We are getting a lot of cooperation from the sportsmen of the State. These go out to 6000 schools in the State free of charge. I don't suppose you can read it, but this says, "Wildlife Lessons, Prepared by the North Dakota Game and Fish Department in Cooperation with the North Dakota Wildlife Federation." This is the federation of the sportsmen's organizations of North Dakota. You who have such wildlife federations realize the federal or national organization each year gives what they term a grant in aid to state organizations they feel worthy. That $900 is matched by $300 of the state's money. Now the North Dakota Wildlife Federation put in as their grant in aid proposal this last year the covers for these wildlife lessons, or money to defray the cost of those covers. Actually they didn't cost much more than that. The 6000 covers that we got cost $1700. You might say, to all intents and purposes, the sportsmen of the State supplied the covers for these wildlife lessons -- or money to defray costs of those covers. We carried their name on the cover. It's going to be a reminder to anyone that sees those covers that we have a going wildlife organization in the State of North Dakota, and, what is more important, they are cooperating with our conservation organization. Then we have the pamphlet series. We put those out in a little more detail and probably more pointed to the adult reader who is interested in certain phases of the management program, and incidentally we use some of these pamphlets wherever they seem to fit into line with the wildlife lessons. For instance, "What is This Winter Kill Business?" We have a lot of marginal land -- The term "winter kill" doesn't mean too much to some of these fellows and they wonder what we mean. So we explained in language a 6-year old could understand. Now, Mr. Hart, I think I have used my 10 minutes. I don't know that I covered the subject in as much detail as I might, but thanks for the opportunity.

HARLEY HOOK (Director, Indiana Department of Conservation, speaking on the subject "Improving Public Relations with Legislators"):

I might explain our club setup, which gives quite a leverage with our legislators. Perhaps some of you have a similar program. We do have a club program, and we have active clubs of almost 1000. The membership varies from 100 to probably 1000. These groups get a man from the Department at least once a month and find out what is going on and what we are doing. They contact their representatives and senators, which is very productive when you come to a legislative session. I am happy to say that our legislative program is one of the very few that got through this last session without being destroyed. We had some that were destroyed.

The 1955 session of the Indiana General Assembly was extremely successful from the standpoint of conservation legislation. Of the bills proposed by the Indiana Department of Conservation all but two (2) passed both the House and Senate, and only one bill, which the Department felt was detrimental to the Indiana Department of Conservation, passed either House. The one bill that did pass the House was immediately defeated in the Sentate, thus, no unfavorable legislation was passed.

A number of people in conservation work have asked the reason for the success of the Department's program in the recent Legislature, especially since many of the administration bills failed, and since the House and Senate were so divided along partisan and factional lines that no one group had a clear majority.

I believe that the reasons for this success of the Conservation Department's program can be found chiefly in the following:

1. The legislative program was a sound program, carefully prepared.

2. The program was one which could be justified on the basis of sound conservation practices both scientific and from experience.

3. An educational or publicity program was inaugurated so that the members of the Legislature and interested groups knew of the Department's program prior to the opening of the General Assembly.

4. That the Department was at all times ready to discuss its program with members of the Legislature and interested groups and individuals prior to the opening of the legislative session.

5. The Department made available to the Legislators, experts from the Department who were able to intelligently discuss any phase of the program, and who, during the session of the Legislature, were able to furnish proponents of the Department's program with statistics and other information to be used in debates.

6. The close cooperation between the conservation clubs and the Department of Conservation.

7. The cooperation between the various Divisions of the Department, and between the Department and groups throughout the State.

To elaborate on these points may I say:

1. The legislative program was a sound program. Ever since the last session of the General Assembly all letters of the "there ought to be a law" type were filed for future reference. About eight months before the beginning of the 1955 General Assembly the division heads and their assistants were called into a meeting where all of these letters were read. Each division was asked to consider those letters that pertained to their division; they were asked to get suggestions from groups with whom they were working, to set out any changes or amendments in the present laws concerning their divisions which they felt would be beneficial, and to propose such new laws as they felt were needed.

Later the suggestions of each division as to a legislative program were discussed in a meeting of all division heads. The Legal Division deliberately criticized each proposed program, demanding proof as to why such a bill was necessary and presenting every argument they could find against such a program.

The result was that those division programs which could not be supported by good arguments, statistics, and practicability were discarded. The remaining proposed bills were again gone over by the director and division heads. These were divided into those most necessary and those least necessary. From this there evolved what became known as the Department of Conservation's primary and secondary legislative programs.

2. Thus, the program was, as I have pointed out, one which could be justified on the basis of sound conservation practices.

3. Since most persons are prone to condemn and criticize things they do not understand, the Indiana Department of Conservation operates on the theory that they can best do a good job by being backed up by an informed and intelligent public. The legislative program adopted was mimeographed and sent to every member of the Indiana General Assembly and to conservation groups and other interested groups.

The Enforcement Division of the Conservation Department has at least one conservation officer in each county of the State. These officers attend meetings throughout their county and act as instructors in conservation subjects at boys clubs, W.M.C.A's, church groups, schools, etc. Each conservation officer was given a copy of the legislative program and at district meetings the program was discussed with the end in view that the conservation officers, who met thousands of people every week would be able to discuss the program with interested persons and could answer questions as to the program.

All field personnel of the Department were briefed in the legislative program. Thus, they were able to explain it to the various groups with whom they came in contact. Newspaper publicity was also given to the program by sending out a release on a different phase of the program each week.

Thus, by the time the General Assembly went into session, thousands of people had had an opportunity to study the program submitted by the Department.

4. The Department welcomed all persons who wished to discuss the program and many members of the Legislature wrote or came to Indianapolis for additional information concerning the program.

5. Once the General Assembly was in session the Conservation Department's division heads and technical experts were continually available to explain the various phases of the program.

The Department's attitude was that its personnel was available to help the General Assembly in any way possible, not to act as lobbyists for its program. Consequently, our personnel was forbidden to contact Senators or Representatives concerning the Department's legislative program. If called upon were to make their files, records, and material available to any member of the General Assembly whether he be for or against a bill affecting conservation.

6. In Indiana the conservation groups are organized into an advisory council. The groups in each county elect a county representative. The state is divided into 11 districts, and the counties' representatives in the district elect a district representative, these district representatives in turn form a county advisory council. While this council has no direct contact with the conservation department, various division heads usually attend the meetings of the State Advisory Council. Its officers are always welcome to discuss the conservation program with the Department. There are more than 1400 groups in the State of Indiana.

While these conservation groups are primarily Fish and Game groups, many of them became interested in the Department's program concerning Entomology, Water Resources, Oil and Gas, Forestry and all other conservation work which many times is over-looked by fish and game men. It therefore became natural that the county representatives and district representatives along with local group officials, who were interested in the Department's program, contacted their Senators and Representatives on many proposed bills.

7. Perhaps the largest single factor in the success of the Department's program was the cooperation between the various division heads. During staff meetings over the past two years, Department heads have been discussing the work of various departments. Today the Supervisor of the Oil and Gas Division knows a great deal about the problems of the Forestry Division; and the head of the Fish and Game Division has an overall picture of the work being done by the Geological Survey Division. With this information each department head is now able to talk to his friends intelligently about the work being done by various other divisions; a thing which is unfortunately not the case in any conservation department and which was sadly lacking in our own department two years ago. During the session of the General Assembly this resulted in finding men in the Fish and Game Division working as hard to explain a bill concerning Entomology as a bill pertaining to their own particular Fish and Game Division. It also meant that the Entomology Division which inspects nurseries, inspects aviaries, and has an extensive program, thus, reaching hundreds of people, were able to explain the legislative program concerning Fish and Game to nurserymen, bookkeepers and others who otherwise probably would never know of the proposed Fish and Game Laws.

This approach to legislation concerning conservation has worked extremely well in Indiana. The same approach has allowed the Department to point out particular features of bills harmful and unwanted by the Department and in each case such bills have been defeated.

PAUL T. GILBERT (Executive Secretary, Game, Forestation and Parks Commission, Nebraska, speaking on the subject "Land Management around Federal Reservoirs" under the general subject of "General Administrative Problems"):

I have not had an opportunity to obtain opinions and experiences of other member states to include in this ten minute report; therefore, I can only report our own attitudes and experiences from Nebraska, and I present them not as the ultimate in correct procedure, but only as our own meager efforts to face the problems involved.

In the past, on most impoundments where practical and where land acquisition was adequate to permit management of recreation and fish and wildlife, our Commission adopted a general policy that these lands should be managed by the state under direct lease agreement with the sponsoring agency. This has been particularly easy to do in the case of the United States Bureau of Reclamation because of their basic laws and policies which are flexible enough to permit considerable latitude in types of management with no required return of income to the local county in lieu of taxes. In fact, Nebraska is now managing 14,760 acres of land around Bureau impoundments, spending the income derived from recreational and agricultural leases for further improvement and maintenance of the impoundment. This procedure has proven most satisfactory to all concerned.

In case of the Corps of Engineers, United States Army impoundments, seventy-five per cent of the income from a given impoundment must be returned to the local county in lieu of taxes and therefore our approach, of course, had to be altered. The basic authority and policies of the Corps considerably handicapped the approach we had used in the case of the Bureau.

We do not have any Corps land as yet under operational management by the state. We do, however, have a mutually acceptable master plan and the Corps has cooperated in their agricultural leases to their tenants in requiring freedom from trespass for the hunters and fishermen on such lands.

Certain circumstances, intentionally or otherwise, seem to be injecting the Corps into actual game and fish and recreation management. For example, on one of our Corps impoundments they have established definite individual duck blind sites which are assigned to an individual on a first-come basis for the season. In addition, the Corps has a full-time biologist employed on this one impoundment. These would appear to me to be duties more appropriate to state or federal game management agencies.

We have had the tireless support and cooperation of the United States Fish and Wildlife Service through their Basin Studies Group in the evaluation of cost and benefit problems, as well as habitat development, and the National Park Service in all phases of recreational planning.

While each reservoir is unique in its own problems, a general over-all approach to reservoir planning might be summarized as follows:

1. Earliest possible notification of all wildlife and recreational agencies as soon as the sponsoring agency first considers the possibility of a new impoundment.

2. The organizing of your own state department with adequate properly trained personnel to study all possible related ramifications of the proposed impoundment.

3. The incorporation of a cooperative study between the sponsoring agency, the State Game Department, the Fish and Wildlife Service and the Park Service to determine losses or gains accruing from the impoundment. It may prove helpful, if not surprising, to check the suggestions of other more remotely related agencies such as the United States Health Service, United States Conservation Service, and others.

4. The encouragement of ideas and cooperation from interested local groups and citizens.

5. The solving of any inter-state problems, or even more advisable, the sublimation of any such potential problems before they occur.

6. The cooperative development by all interested groups and agencies of a master plan and related procedures and policies whereby the maximum in recreational and fish and wildlife values can be realized. This study and master plan should be the basis for a memorandum of understanding incorporating such factors as

    a. Land acquisition needs.
    b. Responsibility of such acquisition.
    c. Development plans for such land for habitat areas, refuges, public shooting and fishing grounds, and recreational areas for picnicking, camping, group camps, cabin facilities, concessions, etc.
    d. Possible need for zoning laws to protect the area from the undesirable effects of some types of private enterprise.
    e. The clearing or non-clearing of timber from the reservoir.
    f. Possible construction of fish attractors.
    g. Areas to be fenced, and by whom.
    h. Construction of access roads and by whom.

i. Grazing and agricultural policies.
j. Types of leases to be used.
k. Manipulation of water levels for the maximum benefits of all uses.
l. And last, but not least, the allocation of basic authorities.

The most difficult of this entire series of suggested procedures and studies will be the acquisition of enough land to fulfill these so-called multiple-use needs.

In the past, as we appraise it now, we have been fortunate in acquiring sufficient acreage of surrounding land to be a challenge as to how we may best develop it. However, recently and spectacularly fast for the government, the President and his Cabinet, initiated considerable change in land acquisition policies by restricting land acquisition to a three hundred foot horizontal around these impoundments.

Considerable effort has been expended in an attempt to liberalize this policy. To date we have achieved only an interpretation by the Corps which permits it to provide public use and access.

One of the most flustrating and annoying procedures we have experienced is this interpretation and definition of words and phrases by the counsels of the sponsoring agencies and by the Bureau of the Budget. Inevitably they seem to use the most restrictive interpretation, regardless of the original intent of Congress. The interpretation of the words "public use," and "public access" is a good example.

While we may not like to admit it, the land acquisition program in the past has resulted in the setting aside of millions of acres as federally owned land, which of course cannot continue indefinitely.

Personally, I feel that the early program was too generous, but certainly the pendulum has swung to an absurd degree to the restrictive side, and believe me, gentlemen, there are those in Washington who will take advantage of any opportunity to restrict land acquisition to the waters edge, with flowage easements above. An alertness on our part in this instance is worthy of resolution and forewarning.

If this new policy continues, the only hope of states with recreational and wildlife budget problems is to look to their own legislatures for recreational funds and to the Fish and Wildlife Service for more generous interpretation of allowable expenditures of Pittman-Robertson and Dingell-Johnson funds for land acquisition and development around federal impoundments; and procedures should be streamlined to a point that very rapid negotiations on such land may be completed at the same time or before the land acquisition of the sponsoring agency in order to avoid being caught in the land inflation that always occurs on such areas.

I do not believe that the sponsoring agencies of the federal government or any other agency should be excused from their fair share of the responsibility of acquiring land for our so-called secondary uses on these reservoirs. I believe our new approach, if you are not already using it, should be a joint cooperative acquisition responsibility between federal and state agencies, with adequate management by the state. I believe there is adequate room for private enterprise on portions of these areas, but the quality and quantity of such enterprise should be well screened and fitted into the best, reasonable, over-all accommodation of the public.

In closing, may I call attention to the smaller watershed type of lakes that are springing up in our communities. In such cases where such control structures are being built and owned by the federal government, it is surprisingly simple for the sponsoring agency to raise the height of the fill only a few feet and actually double or triple the area of surface acres if cooperating state agencies can purchase the additional land affected.

Regardless of the new policies of the federal government, I am sure that the average citizen who sees his tax share become a part of the billions spent for construction of reservoirs in the Missouri Basin expects that at least a small percentage of his money will go toward guaranteeing a clean, decent, well-appointed place to fish, hunt and enjoy himself with his family, and of adequate area to satisfy his needs now and the needs of his children's children fifty or a hundred years from now.

FRED A. WESTERMAN (Fish Division, Michigan Conservation Department speaking on the subject "Acquiring, Developing and Managing Public Hunting and Fishing Areas and Access to Public Fishing Sites"):

Probably no one here today will seriously question the need for governmental agencies acquiring, developing and maintaining public hunting and fishing areas. The awareness of this need may vary in the different states depending on population density and particularly the extent of private ownership. Not too long ago this made little difference, as relatively few areas of privately owned land were posted.

The population shift to urban centers has been exceedingly rapid. In 1900, only 35.9 per cent of the people lived in cities of over 5,000 population. By 1950 this number had increased to 51.4 per cent. In the same period the population has increased from 76 million to over 150 million persons, and it is growing at an accelerated pace today. Limitations on transportation were once a safeguard against trespass by other than nearby neighbors. Our present means of transportation, shorter work days and work weeks, increased prosperity and so forth have changed all this. We are today witnessing more and more posting of private lands in self defense against hunting, fishing and trespass of any kind.

Conservation departments are therefore confronted with the problem of acquiring land for public use. How much is justified? I frankly don't know, but we are still a long ways from reaching our ultimate needs. The greatest pressure comes from the centers of population. The availability of lands depends mostly on their character and the competition for their use.

In the State of Michigan, the Department of Conservation has under its jurisdiction approximately 4,200,000 acres of land of which well over 4,000,000 acres are available for hunting and fishing. This represents over 11 per cent of the total area of the State exclusive of the Great Lakes. Another 2,550,000 acres or 6.86 per cent is owned by the U. S. Forest Service. Eighty-nine and five tenths per cent of the State owned lands are in the State forests and managed for game, fish and timber production. Considerable fishing water lies within these boundaries. These lands represent the larger blocks, and are farthest removed from the metropolitan and agricultural areas. They were acquired mostly through tax reversion but many areas were purchased with game funds and some were gifts.

One hundred fifty thousand acres or 3.51 per cent of the State owned lands are managed principally for small game and waterfowl hunting and for fishing. This represents 47 separate projects located in the southern half of the Lower Peninsula

near metropolitan areas. Most of this has been purchased under the Pittman-Robertson program. The cost has averaged $26 per acre, with the present trend toward higher values. The management of these lands is Harry Ruhl's baby and I'm sure he will be glad to tell you something about this when I sit down.

Perhaps it should be pointed out here that all of the lands administered by the Department of Conservation are subject to tax which is distributed to the local governmental units. The tax on these lands is a flat 10 cents per acre, except south of townline 16 north in southern Michigan. On lands purchased since January 1, 1933, the tax is based on valuation assessed by the State Tax Commission at the same rate paid by private property. Buildings and like improvements used exclusively for conservation are exempt. This tax plan adopted this year more than doubles the tax paid since 1946 on such lands.

It has been a long established policy of the Michigan Conservation Commission not to dispose of riparian lands that have public values. Many miles of trout streams and frontage on many lakes have been acquired for public use in the development and blocking in of the State forests. However, this left many gaps. These are being filled under a program initiated by the Michigan Legislature in 1939 which made provision to use a portion of the resident fishing license money for the acquisition and development of water frontage sites. Since that time the Conservation Department has acquired by purchase, gift, easement and selection from earlier tax reversion approximately 600 sites of which roughly two-thirds are on lakes and the others on streams.

A site with 200 feet of frontage on a lake and a suitable access road to the nearest public highway is generally considered adequate. It may cost anywhere from $300 to $5,000 and upwards. More frontage is usually acquired on streams, particularly in the northern part of the State where even whole sections or quarter sections are obtained. First consideration has been given to the more popular lakes and streams. Seventy-five thousand dollars is available in the current fiscal year for the acquisition of additional sites under the Dingell-Johnson federal aid program. The project is on a state-wide basis.

Under our policy, improvements are limited to rather simple ones. The general plan is to keep the sites in a more or less natural condition commensurate with the uses for which acquired. Most water frontages available at this late date are not suitable in their natural condition for the convenient launching of boats.

Each site presents a different problem for development. High banks are sometimes sloped to the water's edge and stabilized to support cars. On other sites it is possible to construct long sloping ramps where there is room for a turn around and boat landing at the water's edge. In some places, it is more practical to dredge boat slips through a marshy shore to float the boats to firm land for loading on cars or trailers. In general the improvements made on stream sites are less extensive than those on lake sites.

Sites are surveyed and the boundaries well marked with monuments and signs. Wherever required, boundaries are fenced. Standard signs are placed at strategic locations on approach roads to guide fishermen to the landing. Sanitary facilities are provided but not tables or wells. Consideration is given to the aesthetic values by preserving wherever possible all existing trees and shrubs and by planting other trees if necessary for shade or for screening along boundaries. Most sites provide a pleasant place for mother and the children to relax while dad is out fishing. Camping is permitted on most sites in the northern part of the State.

Those in the southern part are either too small or are too close to nearby cottages or homes to allow this privilege.

Access roads of varying length must frequently be built to the site. Whenever possible a standard 66-foot wide right-of-way is obtained. In many cases the County Road Commissions have taken over the maintenance of these roads.

Rules for the use and occupancy of state lands are posted. Their observance presents some problems since maintenance crews visit the sites at times which generally do not coincide with the heaviest use -- week-ends, holidays and evenings.

Some sites within the boundaries of state forests, state parks or other administered units are maintained by these agencies of the Department. Maintenance at most sites is handled by small mobile crews on a more or less regular schedule. This is a growing problem as improved sites are added. At present increased emphasis is being placed on development and maintenance with $175,000 allocated for the current fiscal year. There is a considerable back-log of unusable sites since development has not kept pace with acquisition.

The Department of Conservation recognizes its responsibility both to the fisherman and to the neighboring riparian owners in providing these sites. Extensive studies are made before a site is purchased in an attempt to not only acquire frontage which lends itself well to proper development at a reasonable cost at a place on the lake or stream which will best serve the fisherman, but also to obtain land which will not cause undue inconvenience to other property owners.

Considering the scope of the program it is gratifying to know that most Michigan people have accepted it wholeheartedly. It is easy to understand why the fisherman should regard the program with favor, but the riparian owners also realize that with public landings provided, most of their former troubles with trespassers are eliminated.

It no doubt has been a factor in the growing tendency for fishermen to own and transport their own boat. It has solved the former frequent complaint that non-riparian owners were unable to reach an increasing number of lakes and streams.

Those of us who are responsible for the administration of this program gain a lot of satisfaction in the knowledge that we are not only providing a distinct service to the present generation but to all future generations.

HARRY RUHL (Game Division, Conservation Department, Michigan, speaking on the subject "Directing Hunting Pressure to Overpopulated Game Areas"):

There is a good deal of detail as far as game area acquisition and development are concerned in our biennial reports, and if you are interested we will be glad to send copies to you and answer any questions we can later. Some questions may come up which Mr. Westerman did not cover, but the time doesn't permit me to cover them either.

The subject of directing hunting pressure to over-populated game areas was not selected by me because I think we probably are one of the horrible examples of not being able to do that too well. Perhaps that is the reason for the choice of speakers.

I think the first step would be called diagnosis, a determination of what

actually is the proper population for each species for each major area. For example, in deer management we recognize the symptoms of winter losses, range deterioration, reduction in antler size and reduction in average weight. All of these are specific things which can be rather easily demonstrated and sold to most people. We also recognize some of the aspects of reduced fawn production, which is associated with over-browsing and malnutrition.

The evidence, I think, in our state seems to indicate that the reduction in fawn production begins at a much lower population food ratio than do those more easily demonstrated symptoms. The collection of embryos by using car kills, poaching recoveries, etc., is often inadequate for a satisfactory statistical evaluation of each area and condition. Systematic killing of large numbers of animals is costly and likely to bring serious repercussions among hunters who do not see the connection between killing now to have more satisfactory hunting tomorrow. In the meantime, range and forest conditions are changing to complicate the situation. We have all sorts of variations in local areas, as well as climatic variations such as snowfall and annual precipitation. I think that problem is exceedingly difficult to evaluate currently. It is a tedious and expensive process, but it is a must.

The second item is forecasting. We need more controlled population - food experiments so as to be able to predict the desirable population level long enough in advance to sell the management measures needed before it is necessary to put them into effect. These levels are usually so far below the levels which produce die-offs and failure of the range to maintain its carrying capacity that they are very difficult to determine or prove and demonstrate to hunters.

The third item, I think, would be selling. Selling is a science, too. It takes time, "know-how" and trained personnel.

The fourth element is a study of the hunter himself. I don't believe many hunters know exactly why they do what they do. I believe perhaps we are a little lax in not evaluating this most important aspect of the problem. Human behavior is very difficult to predict and seldom scientifically studied by conservation agencies. Like the hunters, almost all professional conservationists are experts in this field but few of our ideas on this subject will stand up too well under statistical analysis. I include myself in this list. The field of hunter reactions and behavior, I think, needs to be explored by trained personnel if full control of the situation is desired.

The next would be the relationship between the length of season and the bag limits to the actual kill. Such a determination is neither easy nor quick. The only answer I have is long, continued observation of hunting pressures and population and kill on given areas, such as experiment stations or special areas managed for those purposes.

We have some other ideas -- on some species you could give some pretty good guesses as to the relationships between pressure and kills, but there are many blanks. We certainly have demonstrated that doubling the hunting pressure doesn't double the kill. Very often the hunters get tired before they get too many of the species, provided the cover conditions and living situations of that species are satisfactory.

Now for a few other items -- We have found, for example, that the day of the week that a deer season opens has some influence on the hunting pattterns, length

of hunt, and distance of travel. The employment situation in our state during the deer season is such that many plants shut down because there aren't enough people to run the plants. Many schools are embarrassed. The teachers hardly dare to close the schools, but they might as well. Of course, there also is the situation where the management says, "You stay here or else." The work situation affects the hunting pattern, too, and only current knowledge can permit an adjustment for such a shift.

I have here a little folder which was designed primarily for two purposes -- to influence the deer hunter to go where he should go, and tell what happened last year. It tells him by unit areas of the state such things as the average number of hunters per square mile, the number of deer killed, and the per cent of successful hunters. You can see how that would influence people to go a little farther from Detroit to areas where success is a little more assured. A considerable portion of the people, of course, are tied up with associations with places to hunt such as land ownerships, hunting clubs, friends, or a brother-in-law, but there is a considerable number who can be moved by methods of that kind.

We have examples of Department news releases that change the pressure. Last fall we had two and a half times the pressure in one area because of one news story. It is a sample of how you can direct and encourage people to go to a local area.

Then there are maps of problem areas and over-populated areas. Radio and TV can be used. I remember standing before a TV camera and when a man said, "Where are you going to hunt?" I put my finger on a broad circle on the map, but I was accused of directing everybody to the center of that area. I know some people went there.

We know we can change some of the pattern of hunting by indirect methods. You are aware of two-deer and multiple licenses being offered to shift hunters. Earlier seasons may help, also. In some places I think a lower non-resident fee would be a partial answer if you have too few hunters.

We know our bow and arrow license, $10.00 per year, brings in a good many more outside people than if we had the regular non-resident license only. We don't cut the fee in order to kill more deer, but to have more fun.

I think by using these indirect methods you will get some results, but in many areas you will have to come to special quotas and area limits to achieve the desired results.

GLEN D. PAIMER (Director, Department of Conservation, Illinois, speaking on the subject "Administering Private Shooting Prwserves"):

Management of our natural wildlife resources has been and will continue to be a challenge to the various state game departments in producing sufficient harvestable surpluses for our hunting populations. All available techniques and proven programs have been tested under various conditions to meet the human demand. Modern agricultural practices have done much to eliminate available wildlife habitat, and year by year, the wildlife production picture has become dimmer. The subject that I have been requested to discuss today pertains to the role that "preserve hunting" plays in attracting some hunter pressure from our wildlife in the field. The program that we operate in Illinois is knows as a "Game Breeding and Controlled Hunting Area" program and is similar to plans operated in other states.

The various wildlife preserves were originally pioneered by hunting clubs and it was they that developed most of the techniques now applied to various forms of preserve shooting. More recently, the emphasis has shifted to public hunting areas where the individual may pay a daily fee for hunting rights on hand reared game. There are three main types of business operations that can be defined as follows:

1. Club operation where the controlled shooting area is operated for the benefit of members similar to a golf club. The rearing of birds, planting of cover and general management of the area is usually performed by employees of the club.

2. Group operation where all of the labor in connection with the area is performed by members of the group, either rearing or purchasing their shooting stock. This is usually a non-profit operation and is convenient and popular to those that desire to produce their hunting by pooling their resources.

3. A more recent trend has been the commercial operation where a daily fee of from $5 to $7 per pheasant, as well as a daily cover charge, is collected from each individual patronizing the area. I might mention at this point that the state of Illinois has found it practical to adopt the preserve shooting system to its state public hunting grounds program. We have been releasing approximately 25,000 male pheasants each year in the past and will release approximately 40,000 to 45,000 birds this year for public shooting. Each individual pays a "daily usage fee" of $4 for the privilege of hunting on the state supervised areas.

Whether the areas be private or state operated, it is naturally important that suitable wildlife habitat exist on the property under management. No program has been more successful in encouraging landowners to plant suitable wildlife habitat than the preserve type of operations.

Man's ability to propagate certain species of upland game birds in captivity, especially the ringneck pheasant, has made it possible to harvest hundreds of thousands of ringnecks annually throughout the country. The mallard duck is also a popular bird for preserve type shooting and is the second choice in popularity with sportsmen. In my home state, we will have in excess of 120,000 pheasants and 25,000 mallards released on private and publicly operated hunting areas. The ringneck pheasant is known to retain its wild characteristics when reared in captivity and can be depended upon to produce a high quality "hunt" when released under favorable conditions. Pheasants properly conditioned in wire covered pens can fly just as fast, run just as far and his cackle is just as inspiring as birds originating in the wild. Pheasant hunting can further be improved by wise usage of a good hunting dog, either a pointer, springer, retriever or even a just plain dog. As I mentioned, the other specie that is well adapted to controlled hunting is the so-called "domestic mallard." Under federal regulations, the birds that are beyond the first generation of the wild may be bred legally and their offspring may be harvested by shooting methods. It is entirely possible to reproduce good duck shooting without the "shoot them in a barrel" type of operation. I can say that I have personally visited several of our privately operated areas in Illinois and I find their shooting is of high quality and very popular to all participating in this type of operation.

The state of Illinois adopted its present preserve law in 1937 as a result of legislation passed by the General Assembly. The various provisions of the Illinois law were adopted from codes existing in the eastern states and the plan was put into effect for ringneck pheasants only. Modification of the original law was later made to include mallard ducks, as well as chukar partridge. I now believe the Illinois

law is somewhat of a model law in that it has been thoroughly tested and has proven efficient in our own state.

In administering the preserve type law, I believe the following factors should be given careful consideration:

1. The Area Itself. The basic law establishing preserve type shooting areas should specify a minimum and maximum acreage that may be placed under license. Under Illinois conditions, it is desirable to have 500 to 600 acres in a shooting preserve in order to efficiently control our operations. Our law specifies a minimum of 320 and a maximum of 1280 acres. This program could be adjusted to fit the particular situation that may exist in the various states. These areas should be inspected by a representative of the game department before a license is issued and a general cover restoration and management plan should be agreed upon.

A definite understanding should be reached on the plan of operation for the area including the fee to be charged and whether or not the plan is a closed organization and whether public hunting will be solicited. Thorough explanation of the experiences of others and by proper controls being agreed upon will mean better reception by the public and less headaches to the game department.

I would like to emphasize that whatever plan is adopted for hunting should take into consideration the application of the fee on the basis of birds harvested rather than birds released. The popularity of the program can be endangered by the tendency on the part of the operator to over promote his operations. Most of our Illinois areas average about $6 to $7 per pheasant harvested. Some areas receive as much as $9 per bird. Mallard ducks are priced from $4 to $6 and are equally as profitable as pheasants.

The licensed area itself should be posted with metal signs at intervals of 500 feet or less and such signs should be prescribed by the game department. Uniformity in sign size, color and wording is highly desirable.

2. Habitat. I think it is unnecessary for me to emphasize to this group the need for desirable cover in connection with such shooting operations. We usually recommend strip planting along with the normal procedures that are recommended in wildlife management and we find that the farmer will willingly alter his farm plan to increase wildlife habitat. Strips may be alternated with legumes and standing corn in such a manner as to produce ideal pheasant habitat.

One of the most favorable affects of preserve type operation has been to demonstrate the necessity of having suitable cover if hunting of a high quality is to be produced. We think our Illinois plan has done much to encourage practical game management in the various communities where these areas exist.

3. Season. Those states that normally possess a wild pheasant population should adopt a season of suitable duration to accomplish the harvest of hand reared birds that are available for release. In Illinois, we have a season from October 15 to February 15 and this period of time seems to be quite practical and popular. Hand reared mallards may be taken at any season of the year if the shooting operations are isolated to areas where wild ducks are not normally found.

In Illinois we limit the harvest of rigneck pheasants to 70 per cent of the number of birds released, thus allowing for cripples and for the escape of released birds to outside areas. This percentage provision provides a factor that contributes

to the adjacent farms and benefits conservation as a whole. Mallard ducks and chukar partridge may be released under the Illinois law and 100 per cent may be harvested by hunting.

4. Release of Birds. A suitable system of releasing birds on the areas should be agreed upon and adequate records should be required of all licensees. These records should indicate the number of birds released, the date released and the daily harvest taken by hunters. Monthly reports made under oath should be forwarded to the game department at the end of each month.

5. Tags. An irremovable metal tag should be furnished by the game department for the purpose of designating birds legally harvested upon a game breeding and controlled hunting area. In Illinois, these tags have been furnished at a fee of five cents and will be furnished in the future at a fee of ten cents per tag. The 70 per cent harvest provision of the preserve law is regulated by controlling the issuance of these irremovable tags to area licensees. As a matter of example, the tags are issued on the basis of 70 per cent of the number of pheasants released.

6. Hunting License. All persons hunting on these licensed areas are required to possess a regular hunting license. Special provision is made for non-residents who may purchase a non-resident hunting license that is good only on Illinois game breeding and controlled hunting areas. This license is issued at a fee of $5.00 annually.

7. Special Officers. Each licensed area, under Illinois law, may have two special deputy conservation officers appointed for the purpose of enforcing game laws. These commissions are good on the area under license and on other areas adjacent to the preserve. This provision has many advantages in that trespass is controlled and roadside hunting and other misdemeanors are curbed without direct action of the permanent employees of the game department.

8. Rules. If you adopt a preserve type law in your state, it should have some provision that will allow the department to make rules and regulations for administration of the program. Such rules and regulations to be consistent with the provisions of the statutes.

The problems of the game administrator are many and the future looks rather dim for many species of upland game. I know we all prefer hunting under natural conditions on wild game, but I am sure the preserve type of hunting has its place in our administrative program. There are many individuals who desire to spend their own money and effort to produce additional hunting recreation by establishing shooting preserves. These individuals should not be denied the legislation that will legally enable them to pursue a preserve type of operation for their increased outdoor enjoyment. We have approximately 90 areas in Illinois, the plan is popular and it plays an important part in our conservation program. As I mentioned before, we have adopted the preserve plan into our public hunting grounds program and it has worked very satisfactorily. To those of you that have metropolitan areas, I would recommend highly that this plan be thoroughly investigated and considered for adoption in your various states.

JOHN L. FARLEY(Director, U. S. Fish and Wildlife Service speaking on the subject "Cooperation in the National Wildlife Economic Survey"):

For the past several years, we in the wildlife conservation field have viewed

with alarm at our regional and National meetings the trend toward decreased living space for wildlife which has accompanied increasing population, expanding industrialization, and growing agricultural production. All of these trends have resulted in keener and hotter competition for the land and water resources that are essential to maintain our wildlife heritage.

In this competition, we wildlife administrators are faced with the cold, hard economic facts of life drummed into the ears of National Congressmen, State legislators and the public about the dollar values of resource development which may not be compatible with wildlife conservation. We hear about the flood of dollars which can be realized from power revenues provided by hydro-electric plants, the vast monetary benefits from irrigation, the greatly increased farm income from drainage, the high value of property protected by flood control, and the increased profits to industry from water navigation and the resultant transportation saving.

It is not easy to assert the equal partnership of fish and wildlife in dividing up the pie of land and water resources in the face of these substantial dollar estimates. To be honest, there is a tendency on the part of many of those who seek these other types of land and water development to regard fish and wildlife only as something a few sportsmen and a few dickey bird lovers are interested in preserving. We've all heard it said that fish and wildlife has only esthetic value, does not produce any solid profits, and does not figure to any important degree in our economic scheme of things.

You and I know this is not true. We know that fish and wildlife resources support equipment and tourist industries in this Nation of tremendous proportions but, let's be frank again, most of us are guessing when we give out a dollar figure on the value of these industries. We know we are guessing and so do the people who proudly measure accurately their kilowatt hours from a hydro-electric plant in terms of a fixed number of thousands of dollars. We have this thrown up to us frequently when we ask responsible agencies for minimum flows in streams or a slight reduction in irrigated acreage in order to provide water for fish and wildlife resources.

So now, as a result of requests from wildlife administrators throughout the country, the Fish and Wildlife Service is undertaking a survey on a National scale to find out how much our Nation spends for hunting and fishing. When it is completed, we shall all have a valid estimate in dollar terms of the place of fish and wildlife resources in the economy of our country. This, of course, is not to say that we will deny or belittle the esthetic values of fish and wildlife which are as tremendous as they are valid. Nevertheless, we will have a dollar measure, scientifically determined, of fishing and hunting expenditures. This should be of tremendous benefit to all of us in obtaining support of our programs from legislators and from the public.

Since last September, when the International formally requested the Service to proceed with the survey, we have obtained approval of the Bureau of the Budget, clarified legal questions regarding the use of Federal Aid administrative funds for this purpose, and negotiated and executed a contract. Prior to the execution of the contract we invited proposals from all of the major sampling organizations of the United States on the basis of a tentative plan prepared for us by Iowa State College and submitted to all of the States a year ago. We received definite proposals from nine of these sampling organizations.

In considering these proposals, we enlisted the aid of the foremost experts on sampling procedure in the Federal Government at Washington. We obtained the

advice from men who have made a career in this field in the Bureau of the Budget, the Department of Agriculture, and our own Department of the Interior. We told these experts that we were after one objective in selecting a contractor; we wanted to get the most and best information per dollar expended.

Adhering strictly to this criterion, we accepted the proposal of the Crossley S-D Surveys, Inc., of New York. The contract price was not the lowest submitted to us nor the highest, but we are satisfied that this organization will provide more for the money than any of the others who submitted proposals to us.

The proposal of Crossley S-D Surveys, Inc., carried a price tag with a range of $120,000 to $135,000. We accepted the contract at a figure of $134,000 with the express understanding that the overhead costs for all of the states who wish to participate in the survey would be borne by this larger figure for the National survey. The lower figure quoted by Crossley S-D was based on the possibility of a number of states undertaking their own ventures with the organization to obtain state figures. In effect, we said "Give the states the best possible break on cost estimates and we'll carry their overhead costs as a part of the national survey."

Every state has much to gain by joining in and becoming a part of this project to obtain sportsmen's expenditure figures for its own jurisdiction. For one thing, the national survey will inevitably be a better, more comprehensive survey if a large number of the states participate. For another, the state figures derived will be comparable to and related with the figures obtained in the national survey and in the surveys of other states. The same reasons for having national figures to support wildlife programs proposed to the Congress for endorsement apply with equal validity to the individual states.

As you have already been advised, state surveys of this character are approvable Federal Aid projects and may be submitted as combination P-R, D-J projects. Here then, is a chance which may not come again for a long, long time for the states to obtain, at little cost in state funds, a thoroughly planned and soundly executed survey of sportsmen's expenditures. We sincerely and wholeheartedly recommend to each state administrator your participation in this program.

I want to thank the Program Committee for inviting me to participate in the program. Generally, I participate in what seems to be of a controversial nature and it is a welcome relaxation when I take part in this type of program, for almost always it has to do with migratory waterfowl and I find there is still a difference in viewpoint. So now this meeting, as far as I am concerned, is open to questions and answers and the experts will render the answers.

MR. HART: Well, I realize no one is going to throw their tongue into overdrive. This, Gentlemen, is most important.

MR. JIM KIMBALL: I think this should be directed to Mr. White. I wonder what part the Fish and Wildlife Service will play in this. Will you analyze the statistics,etc.?

MR. WILLIAM M. WHITE: The Fish and Wildlife Service will work closely with the Crossley Corporation throughout the survey, but the responsibility for the analysis of the data they collect will be their own. They are to supply us with a statistical report June of next year, and from that we will prepare some type of publication for wide distribution. Does that answer your question, Jim?

MR. KIMBALL: I would like to direct a question to the panel. Let's assume that the majority of the states wish to participate in their own state-wide surveys. For example, that 40 out of the 48 states will want to enter into a separate contract for their own state surveys. Could that information be used to formulate a national survey which would be more accurate than the national survey now contracted to be done for the Fish and Wildlife Service?

DR. CLEMENTS: To answer the question -- No. The sample which we have contracted to design and interview for the Fish and Wildlife Service is a national area of probability sample. By merely whooping it up in the states and adding it all together it would do nothing to increase the accuracy of the national estimates.

MR. KIMBALL: Then the reverse is true -- that what is done on the survey in connection with the individual states cannot be utilized for an amplification on a state-wide basis?

DR. CLEMENTS: It can be partially utilized because there will be interviewers in every one of the 48 states. However, in no single state will there be enough to achieve the type of accuracy that you need for this. You need at least 10 per cent -- no more than a 10 per cent sampling -- for your projections because you want to estimate in terms of total dollars spent in your state by the total number of fishermen, etc. It simply could not be done. I don't know how many interviews the national sample will have in Wyoming. It's not a heavily populated state. We will say perhaps 50 or 100 for Wyoming. That's certainly not enough for Wyoming. However, if Wyoming wanted special estimates, then we would add to the 50 or 100, whatever it happens to be. We would add enough to that and distribute it around in the state so that you could be assured of more accuracy.

MR. KIMBALL: How soon will it be before you will have a fairly reliable estimate as to how much money it is going to cost each state to participate in a state program?

DR. CLEMENTS: The national questionnaire is being pre-tested now. There will be a final valuation of that probably by the middle of August and possibly before. It has to be approved by the Bureau of the Budget. We will furnish the field work before that time. We expect to have final approval by the middle of August. We are designing the national sample now, and we ought to, about that same time, be able to tell every state how many households will fall into the national sample and how many more they will need for special state estimates. At that time we can give pretty accurate cost estimates as to what it will be for any particular state to follow the national questionnaire. Then, if you want additional information for your own special purpose, we will quote on an individual basis how much more that will cost you. It really isn't very much. The main cost is making the interviews, and the extra is for coding, etc. The main expense is getting to the household and making the interview. Don't be frightened by additional questions.

MR. KIMBALL: In going over your material last night, I noticed that one of the questions asked on the survey is "Did you hunt or fish without a license?" You stated you thought the answer would be reliable.

DR. CLEMENTS: Reasonably so.

MR. KIMBALL: Within what percentage of error do you think they would answer that particular question? Would it be safe if we did it on a state-wide basis,

and, as a result of this, would go to our Law Enforcement Division and say either "You did a good job," or "You must do better"?

DR. CLEMENTS: No names will be given. We would rather not have any connection whatever with law enforcement.

MR. KIMBALL: I want to know how accurate it would be. When you say 15 per cent of the people who purchased hunting licenses in Colorado, for example, hunted without a license -- That's all we want -- to test the efficiency of our law enforcement officers. We wouldn't try to pick up anybody who had hunted without a license. Is that going to be within 5 per cent accurate, or 10 per cent or 90 per cent, or what?

DR. CLEMENTS: I don't think there is any way of tabulating that. That is what is called a non-response error. When I speak of "error" I mean sampling error. All we can go on is our experience. If the interview is conducted properly, the interviewer establishes proper rapport. The non-response error there should not be too high. There will be an error. There is no doubt about it.

MR. KIMBALL: In other words, let's say that Colorado, Utah, New Mexico and Nebraska run the same questionnaire on a state-wide basis, and you determine from the answer to that question that 15 per cent of the hunters in Colorado hunt without a license and 10 per cent in Nebraska and 20 per cent in Utah. Would that be comparable?

DR. CLEMENTS: Yes, that would be.

MR. KIMBALL: At least you would know that you were either better or worse than a neighboring state.

DR. CLEMENTS: That is right.

MR. FARLEY: Those hunting without a license are also juniors that are not required to have a license. Also, there is one state that does not require a license for veterans. You have a vast number there. Then, there is your ocean fishing too.

DR. CLEMENTS: That is a separate item in your report.

MR. KIMBALL: Shouldn't you distinguish in your questionnaire between legal and illegal?

DR. CLEMENTS: That can be broken out. You know also what states the veterans are getting that privilege. You can get an indication of law violation. Perhaps, say in Colorado, no one is allowed to hunt without a license.

MR. KIMBALL: No one over 15 can.

MR. SPRECHER: It seems to me that the question of legality is very important because, for instance, a farmer in Wisconsin is allowed to hunt rabbits. You could not compare one state with another unless it is a question of legality.

MR. RUHL: You can't do it that way. You might be more honest in Colorado.

MR. KIMBALL: The reason I bring these points up -- I think there is a lot

of information that could be obtained. When we say we want $20,000 for this survey our Commission is going to ask: "What are we going to get out of it?" We obtained some information on previous surveys of our own. Things like the item I mentioned would do more to sell the survey to the State of Colorado than the other aspects you mention.

DR. CLEMENTS: You mean the number of people who hunted and fished without a license?

MR. KIMBALL: And the breakdown of how we can evaluate the efficiency of say our Law Enforcement Division with say Nebraska's. If we can break that thing down so a firm such as yours can say it is accurate and comparable, then I think we would have a selling point.

DR. CLEMENTS: That could be solved by two or three states having a similar situation and that could be compared.

MR. KIMBALL: Information such as that will sell it to the states, don't you think?

MR. SCHMIDT (Regional Supervisor, River Basin Studies): I don't believe that would be comparable. In your own state you have a much greater incidence of poaching in some areas because of certain crops than you do in some of the others...

MR. KIMBALL: If these surveys are as accurate as they say they are, these areas should be eliminated. There should be enough areas sampled to take care of it. If that is true for the thing you are talking about, it should be true of a different calibre of people who may spend less money. I mean if it's accurate for one question it has to be for another.

MR. WHITE: We will list all licenses held. It will be listed on the questionnaire. If they don't hold licenses and you see by their age they should.....

DR. CLEMENTS: Our agreement with the Department of Interior is that we will have separate contracts and modify the questionnaires in whatever way the states may want for their particular purposes. If the states such as Colorado want to have a separate survey, then we will modify this questionnaire in order to provide that kind of material and so with any other state that wants to enter in. I have been asked to explain very briefly the pre-survey training of these interviewers. They have worked for us a long time. They have been personally selected and trained. Most of them are women that are not fish and wildlife specialists. They work on a great variety of survey subjects. It's been the experience of our survey that an interviewer not a specialist on the subject turns in a much better job than the specialist. Most of the interviewers are college girls and married. The husbands are working. They work on this basis to make a little more money for themselves or their households. They are in their late twentires or thirties. The training system we have -- We have regional supervisors all over the United States. They are being brought into New York and also some of the key supervisors for special training at which a member of the Fish and Wildlife Service will participate. We have, for example, Dr. Nicholson, Federal Aid specialist in Montana. After they become thoroughly familiar with the questionnaire, the purposes of the thing, etc., they will go back and train the supervisors under their immediate direction. The supervisors will then train their interviewers. This is the most thorough training that I have seen on a government contract. The pre-test is much larger than anything I have ever seen. I worked for the Federal Government myself

for 10 years, doing this kind of work. The pre-test is larger and more thorough than any I have seen when I was with the Government. You will have to take our word for it, of course, but this thing is being done the best we know how, and as well as the statistical experts of the Federal Government know how.

MR. BODE: Do I understand that if the state decides to participate in this program it does not have to be limited to this purely economic phase?

DR. CLEMENTS: It can go beyond that. The interviews that fall in each state on the National Survey count toward the number required, and that is already paid for.

MR. BODE: If the state decides to participate, it will be a separate planning for the program for that particular state.

DR. CLEMENTS: A separate contract between the states and our company. In California we estimate that about 30 per cent of the sample which would be required for California would come out of the national sample. California is a heavily populated state. In Colorado, not so much so. I think our estimate was about 10 per cent of the total required.

MR. KIMBALL: If we wanted to test the effectiveness of our public relations program, could that be done?

DR. CLEMENTS: Yes.

MR. KIMBALL: Could you determine the number of people who had heard, say, the explanation for the need of a bighorn hunt. If it's not effective we might decide to do away with our Information Department.

MR. MORGAN: I would like to direct this question to Director Farley: In the event any state wanted information additional to the National Survey, is the cost of that information reimbursable under P.R.?

MR. FARLEY: Yes, because it would be a joint survey.

MR. McCLELLAND (Commissioner, Colorado Game and Fish Department): That is on your 72-25 basis?

MR. KIMBALL: Yes, but we have lots of places for that Federal Aid money.

DR. CLEMENTS: It depends on how much information you want. For the National Survey, I know it won't cost you $20,000. If anyone wants to talk further, I will be here most of and day and so will Mr. Henrikson.

MR. GILBERT: Has there been any interest expressed by business men or fishing tackle men?

MR. FARLEY: Not financial interest.

MR. WHITE: By using an independent organization rather than the Fish and Wildlife Service to conduct these surveys they are more apt to be accepted by Congress -- legislators and that sort of people.

MR. FARLEY: The people are more apt to be free with their information if some unofficial person makes the contact.

MR. McBROOM: I would like to comment further if I may be stating that here is one time when all the state surveys such as have been made through the years can be made on a comparable basis at a relatively low cost because of national participation. I don't know how many thousands of dollars have been spent by the various states to determine this for their own uses, and those are not comparable from one state to another because the same methods were not used. In this case, the state survey data will be comparable to the National Survey. It will fit in as a part of it. It will be comparable to all other state organizations so this is an opportunity that may not come again for a long time for people in this field to measure the impact of sportsmen's expenditures on the economy of the state. It certainly should be useful to all of us in going to the legislative halls to discuss the magnitude of fishing and hunting in the economic scheme of things. It is a real chance to do a job in the whole area.

JOHN H. MORRIS (Personnel Officer, Colorado Game and Fish Department, speaking on the subject "The Annual Exchange of Information Relative to Standardized Positions and Salary Schedules"):

During the past few years and apparently to a great extent resulting from the G. I. Bill, the number of college trained men in the fish and wildlife field has increased tremendously. With the colleges and universities providing such wide and varied courses in fish and wildlife fields we are each year receiving highly trained technicians, many of whom wish to specialize in one phase of fish and wildlife management, and also many who prefer the general field. As a result upon reviewing the minimum qualification for positions other than research, we now find many states either requiring formal education or allowing a substitution of such training for a portion or all of previously required experience.

The State departments have profited a great deal through this set up in that it allows them to set up a progressive promotional program wherein each man must acquire field experience in the operational branches before becoming qualified to move up in the organization to research, supervisory and administrative positions. If it serves no other purpose much is to be gained from the morale standpoint as it eliminates to a large degree, bringing men in from outside the department to fill higher positions.

The second phase of formal educational and training programs in many instances benefits the United States Fish and Wildlife Service and some of the more progressive states in that better pay can be offered along with greater opportunities for advancement.

Comparatively few of the state pay plans can equal those of the Federal Government, especially with the most recent adjustment of 7.5% approved by Congress. We in Colorado have had no cost of living increases, or adjustments in pay plans since July 1, 1953. Now, in the face of the continual rise in the cost of living, we, as well as other states, have lost some of our most capable and promising personnel to other states and particularly to the Federal Fish and Wildlife Service.

The question arises as to what is being done by the states to correct this situation. Well, to my information, some states through their legislatures have set up automatic adjustments based on the cost of living index. Others are in the same position as we here in Colorado. That is, to work through committees of the legislature to adjust the pay plan. On some occasions it is possible to handle increases through classification but this method usually causes more headaches than it cures in that you cannot adjust all positions in this manner.

A glance at the pay plans of the various states will show considerable differences in pay. However, it seems to be rather consistent that those states having large industrial operations and with legislatures controlled by the industrial, rather than the rural, farm, ranch and smaller town votes, have the more progressive pay plans.

In comparing and considering the types and kinds of positions in the various states a definite consistency is found as to the minimun qualifications required for employment or promotion in similar positions. This is especially true in the technical, supervisory and administrative position. Each shows as mentioned before, that college training is becoming more and more a factor in considering applicants for employment or promotion.

For your information and comparative purposes I have prepared the following material on several positions in the Colorado Department of Game and Fish showing the title, brief summary of duties, minimum qualifications, and salary ranges.

POSITIONS IN COLORADO GAME AND FISH DEPARTMENT

DIRECTOR - GRADE 21 - $8400 - $11,400

General Statement of Duties: Responsible for the efficient and successful administration of the Colorado State Game and Fish Department, including responsibility for the enforcement of laws, rules and regulations, which provides for the fostering of fish and wildlife and the harvesting of fish and game in Colorado.

Minimum Qualifications: Graduation from a recognized college or university with a degree in biology, range or game management or in a closely related field and ten years full time employment in the fish and wildlife field, five years of which must have been in a responsible supervisory capacity. Graduate work may be substituted for one year of the required non-supervisory work.

ASSISTANT DIRECTOR - GRADE 17 - $6216 - $7944

General Statement of Duties: Performs responsible technical and administrative work in directing the activities of the Game, Fish, Fur Resources, Law Enforcement and Federal Aid Divisions, coordinating activities of these divisions with other divisions of the Department, State and Federal agencies. Acts as administrator of entire department in absence of Executive Director.

Minimum Qualifications: Graduation from an accredited college or university with a degree in Fisheries Management, Zoology, Biology, Forestry, Range and Game Management, or related fields, and eight years progressively responsible experience in the field of game and fisheries management, five years of which must have been in a responsible supervisory capacity.

BUSINESS MANAGER IV - GRADE 15 - $5424 - $6936

General Statement of Duties: Is responsible for over-all business operations of the Colorado Game and Fish Department and to enforce all fiscal regulations.

Minimum Qualifications: Graduation from a standard senior high school with 10 years of progressively responsible experience in business management which included responsibility for performing or supervising persons engaged in at least two of the following employment fields: accounting, auditing, budget preparation, procurement,

property storage and distribution, personnel administration, maintenance of buildings and grounds duties. Three years of this specialization must have been in a clearly defined supervisory capacity. Qualifying experience may have been gained in industry, federal, state or municipal government employment or military service. - OR - College or university education obtained in an accredited institution with specialization in Business Administration, Accounting, or Public Administration may be substituted for the required experience on a year-for-year basis with a maximum substitution of four years. Successful completion of one year's graduate study in an accredited college or university with specialization in Business Administration, Accounting, or Public Administration may be substituted for one additional year of the required experience. No substitution of education may be made for the required three years of supervisory experience.

PERSONNEL OFFICER IV - GRADE 14 - $5,064 - $6,456

General Statement of Duties: Responsible for conducting the personnel program of a large and complex State Department or institution employing persons engaged in diversified occupations. Implements, explains, and interprets applicable laws, rules and regulations and operating officials of department of institution. Maintains liaison with State Civil Service Commission and other agencies.

Minimum Qualifications: Graduation from a standard senior high school and nine years of progressively responsible experience in personnel work, five years of which must have been in a technical or responsible supervisory capacity affording a knowledge and understanding of personnel management. OR- Substitute college education with specialization in public administration, business administration, psychology, or personnel administration on a year-for-year basis with a maximum substitution of four years.

EDUCATOR III - GRADE 14 - $5,064 - $6,456

General Statement of Duties: Plans, organizes and directs an educational and information program related to the activities of the Colorado Game & Fish Department.

Minimum Qualifications: Graduation from an accredited college or university with a degree in wildlife management, zoology, range management or closely related fields and six years of progressively responsible experience in the field of fish and wildlife conservation, two years of which must have been at the level of an Educator II.

EDUCATOR II - GRADE 10 - $3,852 - $4,932

General Statement of Duties: Conducts public, educational and in-service training programs relating to the activities of the Colorado Game and Fish Department.

Minimum Qualifications: Graduation from a recognized college or university with a degree in wildlife management, zoology, range management, or closely related fields and three years of paid experience in fish and wildlife conservation work.

FEDERAL AID COORDINATOR - GRADE 14 - $5,064 - $6,456

General Statement of Duties: Selects, plans, directs, supervises and coordinates the fish and wildlife Federal Aid projects of the Department including planning and direction of projects provided for under the Pittman-Robertson and Dingell-Johnson acts.

Minimum Qualifications: Graduation from an accredited college or university with a degree in wildlife or fisheries management, forest management, range management, zoology or closely related subjects and six years progressively responsible experience in wildlife research work.

ASSISTANT FEDERAL AID COORDINATOR - GRADE 12 - $4416 - $5616

General Statement of Duties: Acts as Assistant to Federal Aid Coordinator; organizes, implements and supervises Federal Aid Wildlife Projects; plans work of personnel; initiates and approves expenditures of Federal Aid funds.

Minimum Qualifications: Graduation from an accredited college or university with a major in game management, forest management, range management, zoology or closely related subjects, and four years progressively responsible experience in wildlife research work or closely related work.

FISH MANAGER - GRADE 14 - $5064 - $6456

General Statement of Duties: Plans, organizes and directs all activities of Fish Management Division of Colorado Game and Fish Department, operating within applicable provisions of State and Federal statutes and Department rules, regulations and policies.

Minimum Qualifications: Graduation from an accredited college or university with a degree in Fisheries Management, Fish Conservation, Aquatic Biology, or in a related field which must have included courses related to the speciality, and six years progressively responsible experience in the field of fisheries management, two years of which must have been in an administrative or supervisory capacity, and two years actual experience in the fisheries management field. OR Substitute on a year-for-year basis qualifying experience in administrative and supervisory work in fisheries management field for the required education, with a maximum substitution of one year.

CHIEF GAME WARDEN - GRADE 14 - $5064 - $6456

General Statement of Duties: Performs highly responsible and administrative work in directing the enforcement of State game and fish laws. Coordinates the activities of the Law Enforcement Division with activities of other sections of the Department and with local state and federal enforcement agencies.

Minimum Qualifications: Graduation from a standard senior high school and ten years experience as a paid law enforcement officer or in some field of wildlife work. Four years of experience must have been at the level of Regional Wildlife Conservation Officer.

SUPT. FUR RESOURCES - GRADE 14 - $5064 - $6456

General Statement of Duties: Plans, organizes and directs all fur trapping, beaver control and predatory animal control activities of the Colorado Game and Fish Department, operating within the provisions of the 1941 and 1955 Beaver Control Acts, the 1939 Fur Law and Predatory Animal Control Program.

Minimum Qualifications: Graduation from a standard senior high school and ten years full time paid employment by a state or federal agency in the management, protection and trapping of fur bearing animals, four years of which must have been in a responsible supervisory capacity which included public contact work. OR Substitute

on a year-for-year basis qualifying experience in one of the above fields for the required education with a maximum substitution of four years.

GAME MANAGER - GRADE 14 - $5,064 - $6,456

General Statement of Duties: Plans, organizes, directs and is responsible for all functions and activities of the Game Management Division operating within provisions of applicable state and federal laws, rules and regulations.

Minimum Qualifications: Graduation from an accredited college or university with a degree in Game Management, Range Management, Forestry, Zoology, or a closely related field and six years of progressively responsible experience in the field of game management, two years of which must have been in an administrative or supervisory capacity.

REGIONAL GAME & FISH COORDINATOR - GRADE 14 - $5,064 - $6,456

General Statement of Duties: Plans, organizes and directs all phases of game and fish administration including the enforcement of all state and federal laws pertaining to the conservation of all renewable resources for one of four designated regions within the state.

Minimum Qualifications: Graduation from an accredited college or university with a degree in wildlife fisheries management or closely related subjects, plus five years progressively responsible paid experience in the wildlife field, of which four years must have been at the supervisory level. OR Substitute qualifying experience on a two-years-for-one basis for the required four year college degree. OR Substitute qualifying graduate study on a year-for-year basis for the required experience with a maximum substitution of one year. No substitution allowed for the supervisory experience.

REGIONAL GAME MANAGER - GRADE 10 - $3852 - $4932

General Statement of Duties: Responsible for the over-all game management functions for one quarter area of the state including game and bird census, range management, public shooting areas, damage control, etc.

Minimum Qualifications: Graduation from an accredited college or university with a degree in Game Management, Range Management, Forestry, Zoology or a closely related field and three years of progressively responsible experience in the field of Game Management.

REGIONAL FISH MANAGER - GRADE 10 - $3852 - $4932

General Statement of Duties: Supervises the work and personnel involved in the production, planting and stocking of streams and lakes with fish in one quarter area of the state.

Minimum Qualifications: Graduation from a standard senior high school and seven years progressively responsible experience in the field of game and fish work, two years of which must have been in the capacity of a Fish Culturist II or its equivalent and which must have included public contact work.

REGIONAL WILDLIFE CONSERVATION OFFICER - GRADE 10 - $3852 - $4932

General Statement of Duties: Coordinates and supervises a law enforcement program

relating to conservation of game and fish resources in a designated area.

Minimum Qualifications: Graduation from an accredited college or university with a degree in wildlife or fisheries management or closely related fields and three years experience in wildlife conservation, of which two years must have been at the level of Wildlife Conservation Officer and must have included responsible supervisory experience. OR Substitute on a year-for-year basis qualifying experience in the wildlife field for the required education with a maximum sutstitution of four years.

WILDLIFE CONSERVATION OFFICER - GRADE 9 - $3600 - $4596

General Statement of Duties: Enforce state game and fish laws and other laws imposed by statute by patrolling assigned areas. Interprets laws, rules and regulations and provides information to sportsmen and general public. Traps, skins and dresses out pelts of fur bearing animals or live traps and transplants such animals.

Minimum Qualifications: Graduation from an accredited college or university with a degree in wildlife or fisheries management or closely related subjects. OR Substitute qualifying experience in the wildlife field for the required education with a maximum substitution of four years.

WILDLIFE BIOLOGIST III - GRADE 10 - $3852 - $4932

General Statement of Duties: Plans, conducts and may supervise wildlife research survey dealing with the most complex problems of wildlife management and research.

Minimum Qualifications: Graduation from an accredited college or university with a degree in wildlife management, zoology, parasitology, range management or closely related subjects, and four years of progressively responsible experience in wildlife research work. Graduate work may be substituted for one year of the required experience.

WILDLIFE BIOLOGIST II - GRADE 9 - $3600 - $4596

General Statement of Duties: Supervises and conducts wildlife research surveys of moderately complex to difficult problems of wildlife management and research.

Minimum Qualifications: Graduation from an accredited college or university with a degree in wildlife management, zoology, range management, parasitology or closely related subjects and two years of paid experience in wildlife management work. Graduate work may be substituted for one year of required experience.

WILDLIFE BIOLOGIST I - GRADE 7 - $3,144 - $4,008

General Statement of Duties: Conducts wildlife research surveys including biological investigations, census studies, range surveys and trapping and transplanting programs.

Minimum Qualifications: Graduation from an accredited college or university with a degree in wildlife management, zoology, range management or closely related subjects.

FISHERIES BIOLOGIST III - GRADE 10 - $3852 - $4932

General Statement of Duties: Plans and conducts fish research work in its entirety including preliminary investigations, literature review, collection of data, analysis of data, complete reporting, presents recommendations for further research or for Fish Management programs. Prepares research reports in a manner suitable for publication in various publications and scientific journals.

Minimum Qualifications: Graduation from an accredited college or university with a degree in fisheries management or closely related field and four years of progressively responsible experience in fisheries research work. Graduate work may be substituted for one year of the required experience.

FISHERIES BIOLOGIST II - GRADE 9 - $3600 - $4596

General Statement of Duties: Conducts fishery research work as directed on a sound scientific approach consisting of any fishery problems which necessitates a detailed review of pertinent scientific literature followed by gathering and compiling data related to the study. Compiles reports on studies in a systematic and complete manner that will permit accurate analysis for the formulating of fish management recommendations.

Minimum Qualifications: Graduation from an accredited college or university with a degree in Fisheries Management or a closely related subject and two years of full time paid experience in fisheries research work.

FISHERIES BIOLOGIST I - GRADE 7 - $3144 - $4008

General Statement of Duties: Performs technical work in the fisheries research program which would include biological and limnological surveys, creel census, fish census, trapping, fish tagging and marking and rough fish control or eradication.

Minimum Qualifications: Graduation from an accredited college or university with a degree in Fisheries Management or closely related subjects.

FISH CULTURIST III - GRADE 7 - $3144 - $4008

General Statement of Duties: Supervises the spawning, hatching, feeding, rearing and distribution of game fish and the repair and maintenance of buildings, equipment and property at a state fish hatchery producing over 25 tons of fish annually.

Minimum Qualifications: Graduation from a standard senior high school and four years of paid experience in ranch, farm, fishery, wildlife, forestry or conservation work; one of which must have been at the Fish Culturist II level.

FISH CULTURIST II - GRADE 6 - $2940 - $3756

General Statement of Duties: Supervises the spawning, hatching, feeding, rearing and distribution of game fish and the repair and maintenance of buildings, equipment and property at a state fish hatchery producing less than 25 tons of fish annually.

Minimum Qualifications: Graduation from a standard senior high school and three years of paid experience in ranch, farm, fishery, wildlife, forestry or conservation work; one year of which must have been in the capacity of a Fish Culturist I.

FISH CULTURIST I - GRADE 5 - $2748 - $3504

General Statement of Duties: Performs varied non-supervisory tasks involved in the propagation, feeding, care and distribution of fish in one of the state fish hatcheries.

Minimum Qualifications: Graduation from a standard senior high school and one year of paid experience in ranch, farm, fishery, forestry, wildlife or conservation work.

BUSINESS SESSION

MR. KIMBALL: The business meeting should not take too long. We will hear first from the Resolutions Committee. I suggest you read each resolution and if it can be unanimously approved pass on to the next resolution and then pass them all together.

* Mr. Stiles then read the resolutions as prepared by the Resolutions Committee. Following this reading, it was moved, seconded and carried to approve all resolutions but Nos. 2, 3 and 7. Discussion was then held as follows:

S. 2372 - (Resolution No. 7)

MR. MORGAN: Mr. Chairman, members of the group: The discussion is on S. 2372, which is the McClellan amendment to the Coordination Act. I can't help but feel probably this is the most important piece of resoluting that the Resolutions Committee worked on yesterday. I want to make my humble apologies for not contributing my views yesterday. Last night I began looking it over again, and it occurred to me that, due to its importance and because of the fact that some of us who have had experience in trying to get interpretations on such laws as 732 -- it behooves us to very carefully evaluate the wording Mr. McClellan has added to the Coordination Bill in this amendment. I find he uses such words as "integrating" the wildlife program into these projects. Maybe I will have to plead guilty. Maybe this is ignorance. I don't know what might be the interpretation of the word "integrating" wildlife into one of these projects. For that reason, I believe it should be suggested in this resolution that Senator McClellan's terminology be sharpened to spell out authority and responsibility in the Coordination Act. I haven't had time to write out in detail the amendments I would like to make to this resolution. I would like to have this opportunity to express my ideas for your consideration and, as one member of the Resolutions Committee, if accepted, I would be very happy to put in some overtime.

(Section II of the proposed amendment was read.)

I think most of you are familiar with the language. It would be my recommendation that following the word "permit" in line 1 of the printed bill the following language be added: "or with federal finances or with technical assistance." I think we have been thinking too much about the Bureau of Reclamation and the Corps of Engineers. Today we have other agencies doing a lot of development work. I am thinking of the Department of Agriculture and the SCS, who will be in the next year

* See appendex for text of resolutions.

or two carrying on a lot of these watershed improvement programs. I realize that in our state about seven have been accepted for processing. How soon they will get to them I don't know. In those cases, the Federal Government might be carrying on these activities not only this Federal permit, or they might not be in part or in full financing the program. They might be making available technical advice, as an example. I believe consideration for wildlife in these programs should be a part of every one of these projects. Evidently some are going to have a definite impact on wildlife in the area where they occur.

(Mr. Morgan then read page 3 of the printed bill.)

After the word "construction" in line 24 of the printed bill the following language should be added "or provision of financial or technical assistance." There's the same thing here that applied on my remarks on the first amendment. After line 22 of the printed bill, which I believe is the end of Section 2, an additional paragraph should be added, which would provide for authorization to purchase for wildlife management purposes on these reservoirs, which purchase has been curtailed recently through the economic recommendations of the administration. Are there any questions?

MR. STILES: We lost similar bills in the 83d Congress, and it was my understanding in correspondence with Shoemaker that this measure had been gone over very thoroughly by the Committee on Interstate and Foreign Commerce, and that the Committee had come to an agreement on this with Senator McClellan, Chairman of the Committee, and had rewritten it to conform to the agreement of the Committee. The question is, it seems, Are we going to place the advantages of this bill in jeopardy by seeking perfection?

MR. MORGAN: I gave that thought. I will grant you in one place the term "enhancement" is used; yet I don't believe the language of the bill is such that it is going to take us out of confusion that we have suffered along in for years under such bills as Public Law 732. If, through a resolution from an organization of this type, Senator McClellan might be encouraged to add some language, it is my feeling it should be done.

MR. JIM KIMBALL: I am inclined to go along with that. It could have been overlooked. The activity of the Department of Agriculture looks as if that may be one of the major functions. I think that that very definitely needs to be strengthened, particularly those items mentioned.

MR. KIMBALL: What's the general feeling of the member states?

MR. RUHL: I'm confused. I think Bruce stated the question. Maybe there's another way of doing it.

MR. KIMBALL: Better not to resolute but instruct the incoming officers to write Senator McClellan suggesting these things and see how he feels about it. Would that be better? Would all of you favor that procedure rather than the passage of the resolution as Bud suggested?

MR. BODE: I think there should be a resolution on this subject, expressing our feeling with regard to the present Coordination Act. Maybe we can accomplish that as we have in a number of other cases by making our resolution refer to legislation without any specific bill.

MR. MORGAN: I think that is good. I am wondering if the Resolutions Committee could go back into session and redraft that with that in mind.

MR. RUHL: I would like to have any government official who wants to make a statement.

MR. FARLEY: I know this particular language was worked out and Senator McClellan was willing to put it in only after consultation with the Corps of Engineers. I would guess that because of Shoemaker's interest in the things you have brought up that they have been pretty thoroughly covered, but certainly I can see no harm in rephrasing it. It is close to our hearts, but I understood this time, coming out as it has, Senator McClellan would use his weight in getting it through, which would be more effective.

MR. MORGAN: I think any resolution we might adopt today should be worded in such a way as not to antagonize him or tend to have him withdraw his support for the fine objective he has in mind here. I agree with you that wording could be written into our resolution and we could still suggest things we believe are important.

MR. KIMBALL: You know and I know when dealing with major issues such as Public Law 732 that the legislation you get is usually a matter of compromise. You don't get everything you want. The Corps of Engineers and the Reclamation Service do not get everything they want. Usually the type of legislation passed is something between, as is evidenced by this P.R. Act change. If everyone is not united, usually Congress shuttles it off somewhere else until we do get together. I think Carl Shoemaker and Ira Gabrielson and the rest are quite a lot more familiar with the tenor of Congress, and it would be my suggestion too that if this bill as Senator McClellan has introduced it is about the best we can do, that we get behind it and get it passed.

MR. STILES: I don't read all of that weakness into the bill. It also provides that the state agency can make a report.

MR. MORGAN: We have that now in the present Coordination Act.

MR. STILES: As I understand it, that would become an integral part of the report, and whether it was a project initiated by the SCS, the Department of Agriculture or what not, it would still provide for a report from the Fish and Wildlife Service and also the state.

MR. JIM KIMBALL: I doubt it does provide for that. I have been working with the River Basin Studies and I have every doubt about that. We don't think we had anything to support us in getting the program. It seems to me that the Department of Agriculture activities could be overlooked. I don't see the harm in suggesting to do it in a mild way. Mr. McBroom is here. He knows all the ins and outs.

MR. McBROOM: I don't feel it is my place to comment on this at this time. I will repeat what I said at Montreal at the Wildlife Federation meeting. I was asked where the Coordination Act fits into the picture in saving wetlands. I said that there didn't appear to be any legal basis for the Fish and Wildlife Service to comment on these locally sponsored projects.

MR. KIMBALL: Would McClellan's bill change this?

MR. STILES: No. This deals only where they required it from a federal agency.

MR. BODE: Here's another suggestion. Pass a resolution expressing appreciation

to Senator McClellan but go farther and state it is not entirely adequate, and we would like to see certain provisions.

MR. KIMBALL: I think that's the best suggestion yet. Commend him for what he has done but say he hasn't gone far enough.

MR. BODE: Endorse what he has done and express the desire to go further.

MR. FARLEY: I think it valuable to have that spread on the record of the hearing.

(It was moved by Mr. Bode, seconded by Mr. Morgan and passed to rewrite the resolution endorsing Senator McClellan and suggesting certain provisions be added.)

Resolution No. 3

MR. GILBERT: I would like to ask Director Farley if he feels there is anything in these bills which will enable states that in the past have been unable to use all their P. R. appropriation to do so in the future?

MR. FARLEY: I think perhaps the only thing is the added time. The time covers the whole period of appropriation, which gives more time.

MR. KIMBALL: It adds the management too, doesn't it?

MR. FARLEY: Yes.

(It was moved by Mr. Stiles, seconded by Mr. Bode and carried to approve Resolution No. 3)

Resolution No. 2

MR. BORELL: I am A. B. Borell, Biologist withthe SCS. I work in the plains states. This bill is related somewhat to Jim Kimball's talk this morning. Remember he said we had been friends and he wasn't sure after the talk we would be. Actually, we are on the same side of the fence and always have been. When potholes are destroyed, Jim can't shed any bigger crocodile tears than I can. This resolution makes the same mistake many of us do in our enthusiasm to see potholes protected. We condemn all drainage, and when we condemn all drainage we lose the friendship and support of a great many agricultural people, SCS districts, supervisors, etc. We are not condemning it. I am sure whoever wrote this was not condemning drainage. There are several kinds -- that which is adverse to wildlife, that which is neutral and that which is beneficial. I don't think we want to make the mistake of going on record condemning all drainage. Something should be in effect of putting new land into cultivation and change land use that is of value to wildlife,and not specifically to condemn all drainage.

MR. BODE: I don't believe the resolution condemns drainage in any sense anywhere. All it does is put a check on the impetus that is being given to promiscuous drainage. It was the feeling of the Committee when we discussed this phase of it that if some subsidizing was taken off, drainage would go on on that land where it was really profitable under private initiative. We wouldn't condemn drainage as a land practice.

MR. BORELL: One comment -- We all agree exactly and certainly many of us in

the SCS would like to see the drainage of wildlife areas checked. We know we are going to get whipped if we try to stop all farm drainage. I don't think we want to go on record knowing we are going to be defeated. I would like to see us try to find a way of saving the potholes and the good duck marshes.

MR. BODE: I think I would agree with you. However, throughout the past years no one has ever come up with any formulas whereby we could make discrimination between the bad and good. As a result, the bad has been prevalent and nobody has come up with anything specific whereby you could distinguish between the two.

MR. KIMBALL: Are you ready for the question?

(It was moved, seconded and carried to approve Resolution No. 2.)

I want to commend Bruce Stiles and the members of the Resolutions Committee for the job that they have done.

Harry Lutz, will you come up and read the report of the Auditing Committee?

Mr. Lutz then read the following report:

Estes Park, Colorado
July 19, 1955

We, the Auditing Committee, for the 22nd annual meeting of the Association of Midwest Fish and Game Commissioners, in sessions held at Estes Park, Colorado, on July 18 and 19, 1955, do report as follows on Association fiscal records:

1.	Receipts as of July 18, 1955	- $405.02
2.	Disbursements as of July 18, 1955	- $ 5.00
3.	Balance as of July 18, 1955	- $400.02
4.	Outstanding annual dues receivable as of July 18, 1955	- $245.00

Outstanding obligations in connection with annual meeting are believed not to exceed $100 and the cost of printing the annual report is still to be accrued.

The Secretary-Treasurer has been authorized to pay these obligations prior to turning his accounts over to his successor. The Committee expresses its appreciation to the Secretary-Treasurer, Mr. Hart, for the keeping of the records and the clarity of the accounting records.

Respectfully,

Note: State of Kansas
1955 annual dues $35
received as of 7/19/55
J. D. Hart
Secretary-Treasurer

/s/ Harley G. Hook
/s/ Paul T. Gilbert
/s/ Harry F. Lutz

(It was moved, seconded, and carried that the report be accepted.)

MR. KIMBALL: And now we will have a report from the Nominating Committee.

MR. BODE: Just one brief comment. The Nominating Committee departed slightly from precedent. Normally, the Vice-President is moved up into the Presidency. Chester Wilson was the Vice-President and normally the presidency would go to

Minnesota. The Committee felt that since there had been a change in Minnesota, in fairness to Jim Kimball since he will need time to become familiar with the routine, and for the welfare of the organization, it might be well to depart from the precedent and reverse the positions, so we make the following recommendations:

President - Palmer of Illinois
Vice-President - Kimball of Minnesota
Secretary-Treasurer - Sam Parr of Illinois

Board of Directors:

Fred Westerman of Michigan
Bruce Stiles of Iowa
L. P. Voigt of Wisconsin
Elmer Peterson of South Dakota
Paul Gilbert of Nebraska
I. T. Bode of Missouri
Bud Morgan of North Dakota
Harley Hook of Indiana
Charles Dambach of Ohio
Dave Leahy of Kansas
Harkness of Ontario
Malaher of Manitoba
Thomas L. Kimball of Colorado

It was moved by Mr. Ruhl, seconded by Mr. Voigt and carried to adopt the report of the Nominating Committee.

MR. KIMBALL: We will declare Mr. Palmer your new President. Will you come up? Congratulations.

MR. PALMER: Gentlemen: I expect the proper thing should be to thank you for this great honor that you have bestowed on me, etc., which I think I will do, but I do want to reserve just enough in the event this turns out, as President Kimball said, a damned big headache. I can assure you, Gentlemen, those of you who know Sam Parr of Illinois -- and I think he is widely known -- that with his assistance I can do the job. In fact I might say he will be my "dog robber." Sam is capable, and will come through, I am sure, for 1956, and you can rest assured we in Illinois will do everything humanly possible to entertain you and show you a good time, and naturally we will expect all of you to contribute to the values of the convention. If you don't have a good time in Illinois, it won't be the fault of the boys in conservation.

(The meeting adjourned at 4:00 p.m.)

RESOLUTIONS ADOPTED BY THE

ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS

TWENTY-SECOND ANNUAL CONFERENCE

ESTES PARK, COLORADO

JULY 19, 1955

RESOLUTION NO. 1

BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that:

This Association is unalterably opposed to shooting over any baited areas and the Secretary of the Association is hereby instructed to convey this message to the Secretary of the Interior and the President of the International Association of Fish, Game and Conservation Commissioners.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 2

WHEREAS, public money or services are now being used to drain private lands for personal benefit at a time when surpluses of agricultural products exist, and

WHEREAS, there is no national emergency involved warranting the subsidizing of such practices,

NOW, THEREFORE, BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that:

The use of public money or services for the drainage of private lands be terminated, and that the Secretary of this organization is hereby instructed to send a copy of this resolution to the Secretary of the Interior the Secretary of Agriculture and the Chairman of the Appropriations Committee in both houses of Congress.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 3

WHEREAS, the justification and need by the states for the distribution of the unappropriated $13,467,468.61 of Pittman-Robertson funds has been well established, and

WHEREAS, it is our understanding that the provisions of H. R. 6502 and H. R. 5756 by The Hon. Fred Boykin and Senator Alan Bible compromise all previous controversies on this subject,

NOW, THEREFORE, BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that:

The Association goes on record favoring legislation as incorporated in these bills and that the Secretary of this Association is thereby instructed to send a copy of this resolution to The Hon. Fred Boykin, Senator Alan Bible and the Director of the U. S. Fish and Wildlife Service.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 4

WHEREAS, present Duck Stamp revenue is wholly inadequate for implementing the minimum program of the Federal Fish and Wildlife Service in cooperation with the states,

NOW, THEREFORE, BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that:

This organization not only endorses the 40% provisions of H. R. 5757 proposed by Mr. Bible but also strongly recommends specific additional appropriations for the following purposes:

For the acquisition of land and water areas suitable for the breeding, nesting, resting and management of migratory waterfowl in a manner which makes possible that the Federal Government may meet its obligation and responsibility for the protection and management of such birds, under the terms of the International Migratory Bird Treaty Act.

BE IT FURTHER RESOLVED that the Secretary of this organization be instructed to send copies of this resolution to the Chairman of the Commission on Interstate Commerce, to the Chairman of both Congressional Appropriations Committees, to the Secretary of the State and to the Secretary of the Interior.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 5

WHEREAS, H. R. 100, introduced by Rep. Engle of California would open to entry approximately 7,000,000 acres of public lands located along our streams in national forests, to indiscriminate prospecting and mining, and

WHEREAS, these lands presently provide protection against pollution and are valuable to the public for recreational purposes,

NOW, THEREFORE, BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that this organization goes on record as opposing the passage of H. R. 100 or similar legislation.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 6

(Management of Game on Federal Lands)

WHEREAS, there is a distinct need for Congress to define the authority to manage game and fish on all federally owned or controlled lands, and

WHEREAS, the Department of Defense has in many instances failed to cooperate with the states in the management of game and fish on Military Reservations,

NOW, THEREFORE, BE IT RESOLVED that the Association of Midwest Fish and Game Commissioners strongly urges congress to enact legislation as follows:

That State game and fish laws, rules and regulations on resident game and fish apply to all federally owned or controlled lands;

That State game and fish laws, rules and regulations apply to all Military Reservations consistent with necessary security measures established for such areas, and

BE IT FURTHER RESOLVED that Senator Robertson be urged to continue his efforts of the past in the interests of enacting legislation of this nature.

BE IT FURTHER RESOLVED that the Association of Midwest Fish and Game Commissioners is strongly opposed to H. R. 5442 introduced by Congressman Sikes of Florida or any like legislation and that if hunting and fishing or trapping be permitted upon such areas, it be permitted by the public under the conservation laws of the state where it occurs.

Resolution No. 6 continued

BE IT FURTHER RESOLVED that copies of this resolution be transmitted to Senator Robertson, the Secretary of the Interior and the Fish and Wildlife Services.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 7

BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that:

S. B. 2372 introduced by Senator McClellan is endorsed and appreciated. However, this Association believes the bill could be strengthened and respectfully requests Senator McClellan to consider the following additions to the Amendment as presently drawn:

Provide, in the heading of the bill for the language, "for enhancement of wildlife values," rather than the present language, "integration of wildlife conservation programs," as it is believed this would be less ambiguous language; and include in line one of the printed bill, language which would include such agencies whose only contributions might be either financial or technical in nature. The same language might be incorporated in line thirteen of the printed bill.

The Association wishes to stress an appreciation for the interest expressed in S. B. 2372 and to assure that the application of our recommendations are to be left entirely to the discretion of Congress.

BE IT FURTHER RESOLVED that the Secretary be instructed to transmit copies of this resolution to Senator McClellan and to the Fish and Wildlife Service.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 8

WHEREAS, the preservation, wise management and use of migratory waterfowl involves many complex and difficult continent-wide problems, and

WHEREAS, the continued study and pooling of information and the cooperation of all interested federal, state and private agencies and organizations are needed to accomplish these objectives,

NOW, THEREFORE, BE IT RESOLVED that the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, commends the Artic Institute of North America for initiating a study of waterfowl in the artic regions and of the relationships of the management of waterfowl to the welfare and existence of the aboriginal populations.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 9

BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that:

The Fish and Wildlife Service be commended upon the dispatch with which they initiated the survey that was requested by the International Association for evaluating fishing and hunting activity.

BE IT FURTHER RESOLVED that the Secretary of this organization transmit a copy of this resolution to the Fish and Wildlife Service and the Secretary of the Interior.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 10

BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that:

The Fish and Wildlife Service be commended for initiation of the new banding studies and juvenile migratory waterfowl on the nesting ground, and we urge that studies be expanded to include a restudy and a revaluation of all background data supporting the delineation of flyways and zoned areas to the end that it be determined whether present-day conditions may justify modification of former flyway and zone boundaries, and even management of individual species.

BE IT FURTHER RESOLVED that the Secretary of this organization be instructed to transmit a copy of this resolution to the Fish and Wildlife Service.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955

RESOLUTION NO. 11

BE IT RESOLVED by the Association of Midwest Fish and Game Commissioners in annual convention assembled at Estes Park, Colorado, this 19th day of July, 1955, that:

The Colorado Conservation Commission and its able Director, Tom Kimball, be appraised of the appreciation of this organization for the hospitality and courteous cooperation which has made possible this successful and worthwhile convention, and

BE IT FURTHER RESOLVED that the Commission transmit this expression of our appreciation to others who have so cooperated.

ADOPTED BY THE
ASSOCIATION OF MIDWEST FISH AND GAME COMMISSIONERS
TWENTY-SECOND ANNUAL CONFERENCE
ESTES PARK, COLORADO
JULY 19, 1955