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PROCEEDINGS OF THE
41st ANNUAL MEETING

ASSOCIATION
OF
MIDWEST FISH AND WILDLIFE COMMISSIONERS

RADISSON DULUTH HOTEL
DULUTH, MINNESOTA
JULY 15-18, 1974

Dedicated To

A. Gene Gazlay

Who bestowed much of his valuable time
and unselfish effort to advance the goals
and purposes of modern natural resource
management in his State of Michigan as
well as the Midwest region embraced by
this Association.

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TABLE OF CONTENTS

TUESDAY, JULY 16:

Call to Order	1
Roll Call and Announcements	1
President's Address -- Robert L. Herbst	2
Welcome -- The Honorable Ben Boo, Mayor of Duluth	8
Keynote Address -- "Changing Attitudes in the National Fish and Wildlife Scene" -- Daniel A. Poole, President Wildlife Management Institute	8
 Speakers:	
"Canadian Wildlife Service Activities in Eastern Canada" Joseph E. Bryant, Director Eastern Region of Canadian Wildlife Service	17
"Issues in State Resource Management" Dr. Harold C. Jordahl, Jr., Chairman Wisconsin Natural Resources Board	28
"Soil, Water and Wildlife Management" Bill Oemichen Assistant Soil Conservationist for Minnesota	39
"Timber Wolf Studies in the Superior National Forest" Dr. David Mech, Wildlife Research Biologist U.S. Fish and Wildlife Service	49
Panel on "Management of Fish and Wildlife Resources Under Indian Treaties" Moderator: Joseph A. Alexander, Minnesota DNR Participants: Dr. Wayne Tody, Michigan DNR John Popowski, South Dakota DNR Russell Stuart, North Dakota DNR C.W. Threinen, Wisconsin DNR Bill Daugherty, U.S. Fish and Wildlife Service	65

WEDNESDAY, JULY 17:

Report by Al Berner on Highway Assn. Meeting	82
Committee Reports --	
Pro Hunt -- Carl Noren, Missouri	83
Water Resources -- Willard Barbee, Nebraska	84
Liaison with Pheasant Council -- Fred Priewert, Iowa	85
Legislation -- Kent Klepinger, Wisconsin	90
National Coordinating Committee -- Carl Noren, Missouri	93
Resolutions -- Arnold Mitchell, Kentucky	97

THURSDAY, JULY 18:

Speaker:	
"Plans and Programs of the U.S. Fish and Wildlife Service" Lynn Greenwalt, Director	106
Committee Reports --	
Audit -- John Popowski, South Dakota	118
Treasurer's -- Fred Warders, Kansas	118
Nominations, Time and Place -- Russell Stuart, North Dakota	120
Installation of Officers	121
New Business	121
Appendix A Attendance	124
Appendix B Officers & Committee Membership in 1974	127
Appendix C Resolutions	128

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Radisson Hotel - Duluth, Minnesota
July 16 - 18, 1974

First General Session - Tuesday, July 16, a.m.

The meeting was called to order at 9 a.m. by Robert L. Herbst, 1974 President of the Association.

PRES. HERBST: This convention of the Midwest Fish and Wildlife Commissioners is called to order. The first order of business will be the roll call, and I will call on Jerry Kuehn for that.

KUEHN: I will call the roll in alphabetical order: Colorado. Iowa. Illinois. Indiana. Kansas. Kentucky. Manitoba. Michigan. Minnesota. Missouri. Nebraska. North Dakota. Ohio. Ontario. Oklahoma. Saskatchewan. South Dakota. Wisconsin.

(All members were represented except Illinois, Indiana, Oklahoma and Saskatchewan.)

HERBST: Thank you. At this time, there is one of our members who is no longer with us--Gene Gazlay of the Michigan Department, who passed away due to a heart attack recently. I wonder if we couldn't all stand for a few seconds of silence in his memory. Thank you.

I would ask the resolutions committee to consider passing or recommending a resolution on behalf of Gene Gazlay, and perhaps dedicating our proceedings to his memory.

At this time, I'd like to make a few announcements. First, we will have some drawings at the convention at the conclusion of each set of presentations. We will try to break midway in the morning and midway in the afternoon at each session for coffee. A number of organizations have contributed financially and otherwise to the success of this convention, and I'd like to recognize all of them at this time and ask that you give them a hand when I complete it.

(Representatives from the United Northern Sportsmen's Club, the Lake Superior Steelhead Association, the Chamber of Commerce of Duluth, the Radisson Hotel, Federal Cartridge Corporation and Minnesota Ducks Unlimited stood and were introduced.)

There have been many who contributed door prizes, and I will name all

of those as we present the door prizes. Then, of course, we have a number of employees of our department that are assisting in transportation, hosting some of the trips, and many other activities, and I would like to thank all of them. Particularly, I would like to thank Dave Vesall, who really has done most of the legwork and the detailed work in arranging this conference. At this time I'd like to call on Dave for a few short announcements.

(Announcements by Dave Vesall and Milt Stenlund.)

Thank you, Dave and Milt. Apparently the Mayor of Duluth isn't here yet, so I believe we'll proceed and call on him when he does get here. I might also mention that we have other agencies here: the U.S. Forest Service, the Bureau of Land Management, the Soil Conservation Service and the U.S. Fish and Wildlife Service.

It's customary for the president to address the group, I guess, and I'll break my remarks into three segments. One, I'd like to brag a little bit about our state, as long as you're here; secondly, I'd like to give you a brief picture of our department and how we operate; and thirdly, I'd like to give you a few observations on wildlife problems as I see them in the midwest that we face together.

It was the Dakota Indians who so aptly named the State of Minnesota, for in their language "Minne" meant water and "sota" meant white.

Back in the 17th century, Frenchmen came by water from Montreal in canoes westward along the northern shore of Lake Superior. They portaged over towering forest-covered cliffs and they were greeted by lakes--thousands of them--populated by beaver. Today, one can paddle through this same country and make the same portages.

These are the more than one million acres that comprise the Boundary Waters Canoe Area, the last remaining true wilderness of its type in the United States.

It is not difficult today to imagine the voices of the rollicking Frenchmen ringing across the sky-blue waters, through the stately pines, as they paddled their ten-man cargo canoes through the waterways, bringing in trading goods and taking out beaver pelts. There really has been so little change.

And these hardy men who plied their trade for a century and a half are forever written in the pages of our history. The United States Congress and the National Park Service, following long efforts by the State of Minnesota and dedicated conservationists and civic leaders, established the Voyageurs National Park on what is known as the Kabetogama Peninsula, an area almost completely surrounded by water--Lake Kabetogama and Namakan on the south, and Rainy Lake on the north.

Water is something that Minnesota is blessed with. Although we depend entirely upon rainfall and other precipitation as our source, we have water

aplenty. We are the 12th largest state in the United States, but we are blessed with more than 4,000 square miles of inland water, including 15,291 lakes (of ten acres or more), 25,000 miles of rivers and streams, and thousands of marshes. The northeastern part of our state where you are located today borders on the world's largest freshwater lake, Lake Superior. And our water wealth includes the source of the mighty Mississippi, which starts in Itasca State Park in northern Minnesota. We also have the breathtakingly beautiful St. Croix River, which has been added recently to the National Scenic River System and serves as the border between Minnesota and Wisconsin.

The lakes, of course, are remnants of the glaciers many years ago, and they cover five percent of our land area. This natural distribution places our people no more than minutes away from recreational water in our state.

It forms the springboard for Minnesota's tourist industry--five million out-of-state visitors trek yearly to our North Star State to join better than 50 percent of our natives, and they produce jointly a tourist trade estimated at close to a billion dollars. The lures are many and they are varied. There is fishing, with 1.9 million people enjoying fishing both in the summer and in the winter. There is hunting small and large game, with between 500- and 600,000 licensed hunters. There are 453,000 licensed watercraft.

We have 15 major game seasons in Minnesota. And we have some rare species of wildlife, including the timber wolf, the loon and the moose--and in fact the moose was in sufficient quantity so that we've had limited hunting in 1971 and in 1973.

More than seven million people annually visit Minnesota's 95 state park areas. These parks comprise better than 200,000 acres located across our state. And they include the nation's only underground mine, a state park where visitors may descend a half mile into the ground and visit a former iron mine; and (they include) Split Rock Lighthouse, where they may climb a sentinel that formerly guarded the ships on Lake Superior.

Back in 1950, a contest was held in our state to select an appropriate name for Minnesota. The winning name was "Theater of Seasons," signifying the dramatic, colorful changing of the seasons. It did not win wide acceptance at that time. But we are now fast attaining repute nation-wide as a year-round vacation state. We formerly had a reputation as a deep-freeze state, primarily because of anti-freeze ads, I think, but there were enough hardy souls to make us the ice-fishing capitol of the world. Our lakes in the wintertime are dotted with fishing shacks and shelters. In fact, Mille Lacs Lake in central Minnesota has as many as 6,000 fish houses each winter.

Of course, with the advent of the snowmobile, winter activity has really begun to hum. In a span of a very few years, the sport has experienced record-shattering growth, and today Minnesota has 340,000 licensed snowmobiles. With that mobility, other winter activities have grown as well: crosscountry skiing, tobogganing, and, in fact, winter camping.

The terrain in our state is almost as varied as our seasons. Northeastern Minnesota, known as the Arrowhead country, is a place of legend and lore--20,000 square miles of some of the most primitive wilderness remaining in the United States. Here are the rugged forests of pine, spruce, balsam, cedar and tamarack, and it contains the famous Superior National Forest. Here too is our host city, the city of Duluth, the northernmost inland seaport in the United States, with ore boats and ships docking from around the globe. It's the starting point of the breathtakingly beautiful North Shore of Lake Superior.

In central Minnesota is the "Sky Blue Waters Country" or "Paul Bunyan Land," with more than 2,700 lakes including three of our largest lakes: Mille Lacs, Leech and Red. This is one of the great fishing, hunting, boating and resort areas of our state.

The famed Iron Range country to the southeast of the Arrowhead, with the Mesabi Range, still produces 63 percent of the domestic supply of iron ore in this nation.

In southern Minnesota, rolling countryside with rich loam has made the state the third largest corn producer in the United States.

In northwestern Minnesota we have equally rich soil in the valley of the Red River, one of the world's most fertile agricultural regions, producing wheat, potatoes and sugarbeets.

In southeastern Minnesota, you can travel from the Iowa border north along the Mississippi River Valley to Red Wing, and see an area that rivals the valley of the Rhine, boxed between the towering, awesome and picturesque bluffs, and the waters of the "Old Man River." Southeastern Minnesota is a part of our great dairy belt, but it is also famed for our hardwood forests, for our Whitewater Valley, and for the best known city, Rochester, home to the world-renowned Mayo Clinic.

The Twin Cities of St. Paul and Minneapolis provide our state with a highly cosmopolitan, seven-county urban area that claims half of our 3.8 million population. It is also home to the Minnesota Vikings, the baseball Twins, the hockey North Stars, the hockey Saints, and now, the tennis Buckskins.

So we have Minnesota, a land of water, forests, farms, wildlife: an outdoor mecca, vacationer's paradise. While we brag about Minnesota's quality of life, with our industrial growth, and with our wealth of natural resources, the wise management of resources and the protection of our environment is of paramount concern. With all of our blessings--and there is a tendency to take them for granted--we really must be apprehensive.

Indeed, there is the potential for overpopulation, and for overuse and misuse of our land, our water, and our air resources. There is no question but that some of this overuse and misuse has taken place not only in Minnesota, but throughout the midwest, and in fact, throughout the United

States. In our state, for example, we have lost 100,000 potholes, more than 3,000 lakes, and we have four times as many miles of drainage ditches as we have rivers in our state.

We, in Minnesota, have met this challenge with a cautiously optimistic attitude. The aggressiveness of our governor, our department, the Pollution Control Agency, the legislature, industry, and many of our conservation groups has resulted in new and expanded conservation programs as well as landmark environmental legislation.

The 1973 legislative session was perhaps the best in history for environmental legislation. That session greatly clarified and strengthened the water laws of our state, enabling us to better control the use of the state's public waters.

An Environmental Policy Act passed which established an environmental policy for Minnesota and a program for the review of environmental projects and actions. The act states that Minnesota's environmental policy is to create and maintain conditions under which man and nature can exist in productive harmony and fulfill the social, the economic, and the other requirements of present and future generations of Minnesotans. It requires that all actions be in accordance with the act, to the extent practical, and provides for environmental impact statements.

An Environmental Quality Council of state agency heads and citizens was created to study and to coordinate programs of state agencies. The Council also has the authority in such areas as power plant siting and the establishment of critical areas.

Generally speaking, it can be said that our department, the Department of Natural Resources, is the custodian of much of Minnesota's natural resource heritage. Our department is responsible for increasing the benefits and seeing to the balanced use and availability, through management and protection, of our state resources--our forests, our fish and wildlife, our water, our parks and recreation areas, and our state-owned lands and minerals. We were established as the "Department of Conservation" in 1931. Since January of 1971, we have been known as the "Department of Natural Resources," and we have recently reorganized ourselves into three major branches.

The first branch of the department is the branch that develops the policies, the programs and procedures. It consists of an assistant commissioner, the division directors for each of our five divisions, and the appropriate staff.

The second part of our department is the "doing" part. Operations, broken into six regions in Minnesota, with a department administrator responsible for each and every one of the disciplines in that particular area.

The third part of our department is the consolidation of all the ad-

ministrative services: engineering, fiscal, personnel--all of these activities which provide services to the planning and doing part of the department.

We also have as an adjunct to the Commissioner's office, a Land Bureau, a Legal Bureau, an Information and Education Bureau, and the Soil and Water Conservation Commission is now a part of the Department of Natural Resources.

The activities and programs of our department are varied and they're complex, but they all deal with our land and our water resources.

Very briefly, we are responsible for the management and the regulation of the game and fish resources. We are responsible for the administration of more than four million acres of public waters. We are directly responsible for the management of 5.2 million acres of state lands in state forests, state parks and state wildlife areas. We share with the counties the administration and management of 2.9 million acres of state lands which are held in trust for the local taxing district. We manage ten million acres of mineral holdings. We manage 95 state parks, 56 state forests, more than 900 wildlife management areas. We operate 27 fish hatcheries, three large forest nurseries, and we have better than 6,000 miles of different kinds of trails in the State of Minnesota.

It's readily apparent from the description of the function of our department that the various types of land and water areas under our jurisdiction have differing appeals to different people, and that our decisions have a substantial impact on our state. In fact, they almost guide the economy as well as the enjoyment of life in Minnesota. The same is true in your agencies.

We all have many challenges to face. Let me touch on some as I see them in the midwest. Recently we have been faced with problems in appropriations for our federal agencies. The reduction and the freezing and impounding of funds is an area that we must all assist our federal agencies on. We have a great need for public input on environmental decisions; how we do in our agencies and respective groups best provide for this public input? We have a definitely changing attitude of people towards our environment and towards our wildlife resources. We have an increased need for food production in the United States, which is causing land use changes and corresponding effects on wildlife habitat. In fact, it may become a crisis in the next twenty years. We have increased urbanization taking place, not only in the midwest, but throughout the United States, at the rate of five acres a minute. Five acres of green America, wildlife, recreational facilities, and forests, are going into concrete, steel, parking lots, houses and factories. We have greatly increased water problems and a need to preserve our water resources for the many environmental and recreational benefits that we receive from them. We have greatly increased responsibilities in all our respective agencies, many times without added staff or added funds to carry out these responsibilities. Just to give you an example in our department, I listed the changes in responsibilities since 1971 and I found that we have received 193 major new responsibilities

and authorities to carry out. We have an energy crisis upon us, and a corresponding need for additional resources and changes in travel and recreational patterns. We continue to have the lead shot controversy. Throughout the midwest and throughout the United States we are running into difficulty with the definition and clarification of Indian rights on hunting, fishing and ricing. We have a greatly increased demand for wood products in the country, and here in Minnesota we have moved in the last year from harvesting 57 percent of our allowable cut to almost 80 percent of our allowable cut. Last winter was the highest timber sale year in the history of our state. Now this has had a benefit for the economy, and in some cases a benefit for game habitat, but we must be careful that we don't over-harvest, and that we do manage correctly. The Endangered Species Act which passed now calls for better programs of non-game management, and of course a close, cooperative effort between the federal and state governments. Here in Minnesota, we've been involved with new mining proposals for the potential development of copper-nickel in northern Minnesota; we are sitting on top of a vast supply of ore and, in fact, one formation alone is worth 55 billion dollars. But mining brings with it tremendous environmental and economic problems. We're faced with the potential problem of where to put the tailings that are now going into Lake Superior, where best to put them on the land. Others of you are faced with similar proposals such as coal and oil shale developments because of the energy crisis. In the area of highway and road construction and maintenance, we have also received many wildlife problems.

Recently we sent Dr. Al Berner of our department to represent the Midwest Association at the American Highway Association's meeting in Washington, D. C., and later during the conference he will report to us on that.

We have recently appointed Dick Wettersten to the National Coordinating Committee, which is an important committee to our Association. The International Association has now been following 50 bills before Congress which are under consideration by our legislative committee. The resolutions that we will adopt here at this conference will be of great help to our International committee in deciding what type of testimony that we ought to provide on the various bills. We have been actively following on the International level many of these legislative proposals; one that we are actively pursuing at the present time is the Blatnik bill to strengthen the Fish and Wildlife Coordination Act. It needs the support of all of us here.

In summary, the increasing demands on all of our resources will continue to complicate our work and provide us with many challenges. We at this annual meeting will be touching on many of the problems that I have identified. I trust that the meeting will be informative; we will try to make it as enjoyable for you as we can; and most importantly, we hope it will result in new ideas and in new directions to solve our joint challenges.

Thank you very much.

At this time, we're very honored to present to you the Honorable Mayor

of the City of Duluth, Mayor Ben Boo.

WELCOME

by

Ben Boo, Mayor of Duluth

Good morning, Bob. Thank you for arranging to bring this group here.

We've been actively involved in this community in the Spirit Mountain Project which relates somewhat to your outdoor activities. Two years ago we discovered that unknown to us there was within our city limits the largest potential ski hill in three states. We took the idea to Jim Watts, the director of BOR, and he endorsed it as a fine regional project and supported it with a substantial amount of federal money. We sold local bonds too. It was designed by engineers from Aspen and its uniqueness, of course, is its location within the city limits. I hope you'll have an opportunity to see it.

Thank you so much for coming.

PRES. HERBST: Thank you very much, Ben. At this time, we would like to call on Dan Poole, who in my mind, is one of the finest conservationists this country has ever had, truly one who we all respect, who has given us much help and support on many conservation programs. At this time I'll call on him for our keynote address.

CHANGING ATTITUDES IN THE NATIONAL FISH AND WILDLIFE SCENE

by

Daniel A. Poole, President
Wildlife Management Institute

Invitations to address a joint group of Canadians and Americans invariably evoke feelings of temptation and frustration. Temptation because, despite some differences in outlook and approach, wildlife's future in both nations hinges largely on similar circumstances. And frustration because one's talk can be a drag to some listeners if it dwells too much on the problems of a single country. But these hazards and enticements have been faced and endured by both speakers and listeners for a good many years.

In the U.S., wildlife management is under severe criticism. Humane and preservationist groups assert that management is killing. Nothing else. They charge the agencies and their employees with being hunters' brokers. Hunters are described and depicted in unflattering terms and situations. National television and the big city press aid in spreading these simplicities. The people who once lamented about the big bad wolf are largely now the same people who want to enshrine it. And the wildlife profession is only now catching on to these changes.

The roots of this criticism run mainly through urban centers. The

reason for this may be that our national population is becoming unmindful of the land's sounds, its smells, and its wondrous, yet finite, capacity to renew living resources. Most of the consumers of resources live apart from the land where their food and fiber are produced and, more importantly, life and death are coequal. Their isolation is likely to continue.

Similar things are occurring in Canada. On both provincial and federal levels, professional wildlife managers are concerned about anti-firearms and anti-hunting sentiment. If there is no criticism of scientific resource management in Canada, its emergence may be only a matter of time. But I have seen plenty of harsh reactions to harp sealing and wolf programs in Canada.

During the past month, I took part in two wildlife meetings, both of which involved Canadian and American wildlife administrators and biologists. The first was the Workshop on the Management Biology of Wild Sheep of North America, held in Montana. A more recent meeting was the Canadian Federal-Provincial Wildlife Conference, held at Victoria, British Columbia. At both meetings, Canadian and American wildlife administrators and biologists found themselves comparing notes on largely similar experiences. So, wildlife interests in Canada and the U.S. do share many of the same problems and, equally important, many of the same opportunities.

In contrast to these two meetings was a third, held in Washington in mid-June, under the aegis of a national television personality. Its focus was on endangered and threatened wildlife. At that meeting, listeners applauded when speakers criticized wildlife management and hunting. And they hissed and booed other speakers, including myself, when they talked about the necessity of wildlife management and the biological acceptability of regulated sport hunting. This reaction is all the more alarming and dangerous because it involves well-educated and influential people. Their leaders are skilled publicists and seasoned legal strategists.

Now, there's no easy answer to the present situation, nor is there likely to be one in the short term. We all know that much of the public and press outcry is superficial and improperly aimed. We all know, too, that the long-term solution lies in more and better scientific management, not in less.

The threat to wildlife lies in those social and economic aspirations of man that encourage the impairment and destruction of vital land and water habitat. If wildlife is to persist in abundance and diversity, we must get better accommodation for it in man's use of land and water. The unrelenting expansion of human population, in our countries and throughout the world, makes attainment of such accommodation at the same time increasingly imperative and exceedingly difficult.

But try we must. What should be done?

First priority should be given to getting wildlife a better break in man's use of land and water. We must significantly improve public awareness so that the public can be made our allies in urging greater consideration for wildlife in all activities that influence substantial areas of land and water. Habitat maintenance and improvement must be a constant goal.

Your Association made a good move in this direction when a working group, Maynard Nelson and Keith Harmon among them, assembled information and went to Washington and convinced legislators of the need to give wildlife a stronger role in the national farm program. Potentially, millions of acres of private land could be affected.

Forestry, agriculture, grazing, water development, mining, energy, and all other programs and activities should be examined, not just from the standpoint of minimizing their impacts upon wildlife, but more appropriately from the standpoint of determining how wildlife can be benefited. In the States, we currently are doing an inadequate job on our public lands, which by virtue of their singular ownership and administration should be most susceptible to wildlife's needs. In far too many instances, our knowledge of wildlife enhancement is not being applied in public land management on either federal or state lands. Our record is even less encouraging on private lands.

We cannot capitalize on the great public interest in wildlife if we persist in reacting rather than leading. We invest too little in our information and education programs and equally important, and sadly, in my view, we set no performance requirements for them. We who are best qualified and who should be telling about wildlife's problems and opportunities are not doing so. As far as public information is concerned, we deal in minorities, not majorities. We greatly need public understanding and support, but seldom do we actively and imaginatively seek it. And sometimes, in innocence or indifference, we offend or alienate public wildlife interest, rather than reassure it.

How many times have you seen, perhaps even in your own news releases, that pheasants are going to become legal targets on October 1? That deer will become legal targets on November something-or-other? Here, from Wyoming: "Game and Fish Commission favors two year moratorium on grizzly killing." How, in God's name, can any idiot use that kind of a headline, with the national sensitivity about the grizzly today? Anyone who's supposed to be interested in the fish and wildlife profession?

This is unfortunate that this is happening, because more people are becoming ecology-minded. They are beginning to sense the action/reaction situation that exists in nature. Even resource professionals are becoming ecology-minded, but their interest has a narrower purpose at this stage.

Foresters, for example, are sweating under the public's demand for a better grade of land management, and they are beginning to court a stronger relationship with wildlife interests. Agriculturalists assent more readily to including wildlife considerations in national farm programs, not because

they're all that keen for wildlife or for hunters, but rather because they are beginning to sense the need for concessions in order to continue to get public financial assistance.

The time is at hand for the infusion of wildlife considerations into the programs of all agencies whose activities influence habitat needed by wildlife. More habitat, by the way, than all the acreage wildlife agencies could ever hope to influence directly under the most liberal financing and authority. In the States, we have the prospect of constructively influencing wildlife decisions on federally-owned lands which make up one third of our land surface. Through the national agricultural programs, we can influence millions of acres more in private ownership.

Another need is for wildlife agencies to evaluate their own programs in terms of present-day situations. Shortage of funding is a persistent complaint, but are we correct in assuming, as we do, that all the programs and activities currently in force are needed or worthwhile? We chide federal agencies for their seeming inability to change, but are the state agencies any less susceptible to programming by tradition? I doubt it.

The states also could help greatly in easing some of the adverse reaction to wildlife management and to hunting by developing a stronger client relationship with hunters. Some of the strongest criticism of hunting is provoked by the unthinking and uncaring actions of a few hunters. The adverse reaction to this minority discredits all of the hunting fraternity.

For wildlife's sake, for hunting's sake, and ultimately for their own sake, wildlife agencies must strive to inculcate hunters with a broader understanding of wildlife conservation, sportsmanship, and their responsibilities to landowners, as well as the proper handling and use of firearms. For far too long, this latter subject--proper handling and use of firearms--has dominated official thinking as the reason for offering hunters any kind of instruction at all. It no longer suffices as the sole coursework for the basic education that all beginning hunters and shooters must have.

Agencies must assume social responsibility for each hunter, just as they have assumed a biological responsibility to him for years. Agencies must realize that anti-hunting and anti-management reaction may stem as much or more from an adverse sociological reaction to hunters and hunting as it does from an adverse biological reaction. You should be ever-mindful of the danger of making non-hunters into anti-hunters.

Also, all hunters and shooters, both trained and untrained, should be held strictly accountable for their actions in the field. Few states make effective use of license revocations, denials, or other non-fine penalties. Those that do say there is a salutary effect on the field conduct of hunters. Under their migratory bird permit, Canadians have the authority to revoke a hunter's migratory bird hunting privileges for one year following conviction. Let's do more to convince hunters that theirs' is a privilege, not a right, and that the exercise and appreciation of this privilege carries responsibilities as well. Agencies cannot get too tough on this,

in my opinion.

My comments to this point seek to respond to Bob Herbst's invitation to speak about "changing attitudes at the Washington, D. C., level and across the country in respect to fish and wildlife management." Each subject I've brought up--increasing urbanization, the impairment and destruction of wildlife habitat caused by rising population and ill-planned development, the failure to fully integrate wildlife into programs involving substantial acres of land and water, the nagging suspicion that wildlife agency funds and manpower are not being used to maximum advantage, and the harmful impact of unscrupulous and uninformed hunters on wildlife management--these are the principal factors that are contributing to changing attitudes in both of our countries.

The belief of our opponents, in a nutshell, is that wildlife management is unresponsive, that it caters exclusively to hunters and game and seldom to wildlife. (I would wish that the word "game" would go out of our vocabulary, and that we would use "wildlife" universally. Our opponents now in Congress are trying to set out in legislation the words "fish and wildlife and game" as though game species are not wildlife.) They believe, too, that wildlife is endangered because of hunting; that the removal of wildlife, where necessary, should be done by professional killers and never for sport; and that, as a consequence, maximum effort should be made to upset current wildlife management systems and programs, obstruct sport hunting, and deny funds for programs that appear to favor hunting.

These are the cards that we have been dealt. They're on the table. Our professional response will help shape the outcome. Now, I want to focus on two or three issues that involve us directly at this time.

It may surprise some of you to hear me say it, but after well over two decades in Washington on my part, I can tell you without fear of exaggeration that the purposes and programs of fish and wildlife agencies are barely understood in the nation's capital. Seldom are they understood by members of your Congressional delegation, by their staff assistants, or by the professional staff members of the legislative committees who do most of the drafting of new laws and amendments. There are exceptions, but this is an accurate portrayal of the situation on the whole.

These people know virtually nothing about how you are financed, what your responsibilities are, the sensitive division of wildlife labor between the federal and state governments, or any of the rest of the drill that is known so well to you. Few understand what it is that you seek or need in order to do a better job for wildlife in the public interest.

For the most part, national legislators are no better informed about your programs and responsibilities than is the general public in your state. I do not have personal knowledge of the Canadian situation, but with people being as they are, a similar situation likely prevails there.

Now, like it or not, the scene of major wildlife action in the United

States is shifting more and more to Washington. There are many reasons for this. Among them is that state wildlife agencies are better able to give input to their state legislatures, so protectionist and humane groups are shifting the battleground. By shortening the information supply line, they lengthen yours. No respecter of the niceties of federal and state relations, or even the relations between countries, the press and television go directly to the people on a near-instantaneous basis. One skilled publicist or lawyer can make it sound as though he is talking for millions of people. And, further compounding the problem is the propensity of some politicians to hear a squeaking wheel, and therefore to take actions that may be right politically but incorrect biologically. Time and time again, state wildlife people ask me, "Why don't they leave us alone?" My answer is, and my answer's got to remain, "Your troubles are just beginning."

At present, the states are ill-equipped to represent their interests nationally in any kind of a coordinated manner. Some fail to realize that the difficulties faced by Maine or California are their problems, too. During the marine mammal hassle of a couple of years ago, some state people told me that they were too far inland to see whales. They could not understand that the fight was over the continuation of scientific management, and had not a damn thing to do with whales.

States respond irregularly to these issues if, indeed, some respond at all. Personal appearances before Congressional committees seldom extract maximum political advantage. States frequently are unable to deliver their most knowledgeable employees as witnesses. I have sat through too many Congressional hearings for too many years to conclude otherwise. I am not criticizing, I am reporting facts. I might tell you, it hurts to lose ball games when one's best players aren't even in the stadium.

Administrators who take an active role in this Association and other regional associations and in the International Association are mindful of this weakness. And initial steps--I say initial--are being taken to correct it. But there frequently is difficulty in coming up with unplanned travel expenses and in obtaining clearance for out-of-state travel. Gentlemen, the wildlife ball game is being played in a new league, and some of the big games are going to be out of town. You, your commissioners, and your governors had better realize that your detractors, by intelligent design, are skillfully centering their actions on the national legislature. Tradition, accomplishments, division of responsibility, and the established systems are meaningless to them. They seek to raze the existing structure. Adoption of resolutions and occasional letters will not put these people down. You must develop an offensive and the means to implement it. Today and for every day following. The days of sunshine are behind you.

Earlier, I mentioned the effective coalition that member states of this Association formed to show Congress that the farm program, as it was being operated, was detrimental to the public's interest in wildlife. The solid information provided by your group in cooperation with the Southeastern Association convinced Congress of the necessity for writing stronger wild-

life authority into the new Farm Act.

But that fight, while won, now is being lost. Neither the Administration nor the Department of Agriculture is doing very much about the wildlife authority in the new Farm Act. Required wildlife advisory board members have been appointed in some states, but appointments in others are being held up to obtain political clearances. Not biological clearance, political clearance. Members of the national advisory board are yet to be named, despite the fact that the Act was approved nearly a year ago. For good measure, the Administration is attempting to sack the Water Bank program and to eliminate the long-standing restriction on the use of federal funds to drain wetlands of value to wildlife. Fortunately, these latter two changes are not likely to come about.

Our profession has failed dismally in getting the U.S. Agriculture Department to fully honor wildlife authorities in earlier Farm Acts. Habitat maintenance and improvement are among wildlife's greatest needs. How long are we going to sit by while the new authority of the 1973 Act is ignored? Once again, your Association could lead the way by putting together a coalition to smoke out the obstacles and to clear the way for greater consideration of wildlife.

Another effort needing your prompt assistance is that to expand and strengthen the Fish and Wildlife Coordination Act. This deals with fish and wildlife in federally constructed and licensed water projects, as well as permits for private projects affecting navigable waters. Public hearings on pending proposals recently were conducted by a subcommittee of the House Committee on Merchant Marine and Fisheries. Effort was made to get favorable expressions from all the governors and from state fish and wildlife agencies. Many have responded; some have not. If your state is not on record in favor of this vital amendment to the Fish and Wildlife Coordination Act, or if your governor has yet to endorse it, then I urge you to get busy as soon as you return home. This proposal can be enacted into law this year, if everyone will pitch in.

The chairman of the National Coordinating Committee on this subject, Carl Noren, is here; Dick Wettersten's a member of the NCC; I am a member, and there may be other members here too. We sent to each of the states this little conservation alert called "Strengthen the Fish and Wildlife Coordination Act." I've put copies out on the registration desk. This sets forth the numbers of the two principal bills; the best one--the strongest one--is by Rep. John Blatnik, in whose Congressional district we are today. This gives the pertinent information. Those of you from agencies who have not made your wishes known to the Merchant Marine Fisheries Committee, as well as to your own senators and congressmen, I urge you to get a copy of this and to follow its entreaties.

Secondly, just for those of you who may wonder why you get something printed with Citizens' Committee on Natural Resources on it, it may be a group that few of you have ever heard of. Let me tell you that this is

our--this is your--registered lobbying group in Washington, D. C. This is one way that we fellows there, by participating in the citizens' committee on an individual basis rather than an organizational basis, can have a registered lobbying organization doing the kinds of lobbying that we cannot do as tax-deductible organizations. So, when you get anything from the Citizens' Committee on Natural Resources, you're getting it from your friends in Washington, and you're not getting a lot of hokum.

Now, the current effort to obtain an organic act for the Bureau of Land Management should be of interest to our Canadian associates. The public domain lands administered by the Bureau of Land Management in the U.S. are much like the Crown lands in Canada, except that the latter are provincially owned. The other major administrator of federally-owned lands in the United States is the U.S. Forest Service. But unlike the Forest Service, the BLM has no basic legal charter charging it to manage the lands for their multiple resource values, wildlife included, and giving it the authority to develop programs and to establish necessary regulations and to enforce them.

This is most unfortunate because BLM administers some 457 million acres of public land in Alaska and in the contiguous states. Wildlife suffers as a result, and so does wildlife-dependent and other public recreation. To date, such vested interests as grazing, mining, and timbering largely have controlled the direction of BLM's program. Several days ago, the United States Senate passed an organic act for the BLM and a House subcommittee currently is writing its version of a similar act. Again, with your assistance, this act also could become law during the 1974 congressional session.

I mentioned the Crown lands because of their importance to the provinces. These are public lands, too. Canadian friends tell me that few provinces, there may be some, but few have adequate authority to administer and to manage Crown lands for all of their resource values. Yet Crown lands occupy significant parts of provinces, up to 95 percent in British Columbia, and nearly 50 percent in New Brunswick, I know. And, as in the U.S., vested interests have much influence over their management direction. Grazing and timbering licenses and leases can run for exceedingly long terms.

Now, in New Brunswick, the Wildlife Institute recently completed a survey of the Provincial Fish and Wildlife Branch, and the Crown lands, amazingly, were looked upon as something of a bother, even by some fish and wildlife biologists. They were amused by our suggestion that under improved administration the lands likely could be made to provide much better wildlife habitat and to support increased populations of moose, deer, grouse and other wildlife.

"The timber industry's got the land all locked up," they said. But isn't getting such unbalanced land use unlocked also a justifiable mission of wildlife interests? As an aftermath of a recent New Brunswick forest resources study, a million-plus acre tract of Crown land has been withdrawn from timber license and a biologist assigned to plan for fish and wildlife

enhancement on a pilot basis. With its recognition of the non-fiber values of forested Crown lands, that report is a significant departure from past thinking in New Brunswick.

I'd be pleased to send a copy of the BLM organic act when it's finally passed here to any Canadian who might wish to review the policy statement and the various resource authorities in it. Surely, the environmental interest that has emerged in both of our countries would support a concept of balanced land management regardless of provincial, state, or federal ownership of the land.

Now, to sum up, I wish to emphasize a personal belief that national attitudes toward fish and wildlife, angling, hunting and scientific resource management have changed and are continuing to change at a swifter rate than the managers and sportsmen can or appear willing to accommodate.

Our most serious failings may be in the area of understanding this social phenomenon so that we can respond intelligently and successfully to it. Durward Allen's 1973 Committee on North American Wildlife Policy noted, "We have long bewailed our inability to reach the general public with facts and to create a better understanding of sensitive management issues. We do not yet know the limitations of human densities in outdoor programs. Or how to best serve the long-term interest of the people in decisions of quality versus quantity. The biologist alone, the social scientist alone, the economist alone, cannot deal with these questions. Their combined effort is required and it must do great things."

In short, my friends, we are in a new game. And in the long run, principles may persist, but only if we strive to make them stick. I thank you.

PRES. HERBST: Thank you very much, Dan, for an enlightening and thoughtful presentation. We have a few minutes and if there are any questions for Dan or any comments, I'd be glad to take them. Any questions?

(Unintelligible question from audience.)

POOLE: John Dingell's House Subcommittee on Wildlife, Fisheries and the Environment, which is a part of the full committee on Merchant Marine Fisheries, has concluded public hearings. The last hearing was last week; the states had eight or ten people in, and the federal agencies also, who testified. Dingell's subcommittee now will be moving to the stage of what they call "marking up" the bill--that is, agreeing on their version of the bill. Mr. Blatnik is a key person because he is the chairman of the House Public Works Committee, and as such, his committee sits over many of the federal water construction programs that would be most directly affected by an amendment to the Fish and Wildlife Coordination Act. It's extremely helpful to have Mr. Blatnik interested in this subject. If enough people will contact the Dingell subcommittee, and their own congressional delegations, to express support for this, I think we stand a pretty good chance

of getting it through all the way this year. No Senate hearings have been held.

PRES. HERBST: Any further questions? If not, at this time we'll recess until 10:30. Thank you very much.

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Reconvened Tuesday a.m. Session

PRES. HERBST: If I could have your attention, please, we'll reconvene. We have one brief announcement that Earl Cunningham would like to make.

CUNNINGHAM, U.S. FISH AND WILDLIFE SERVICE: This is my first opportunity to sit in on one of your Association meetings in the midwest, and I just came to look, but I had such good news that I thought I should share it with you.

The Appeals Court in Washington, D. C. last week (a three-judge panel) ruled in favor of the Secretary of the Interior and the U.S. Fish and Wildlife Service in the case of The Humane Society of the United States v. Rogers Morton, et. al. This was a case that all of you are familiar with, in which they had enjoined us from holding public hunting on three national wildlife refuges. The principal one in contest was the New Jersey Great Swamp National Wildlife Refuge. We won the first case, the judge ruled in our favor; the Humane Society subsequently appealed the case and the three-judge panel has ruled again in our favor. I don't think we won a war, but we certainly have won a battle.

I thought you'd be interested to know that for the time being, public hunting on national wildlife refuges, according to the Appeals Court, is "expressly named as one of a number of alternatives by which wildlife control may be exerted." Thank you very much.

PRES. HERBST: Thank you. At this time, it's my pleasure to introduce Joe Bryant, the Director of the Eastern Region of the Canadian Wildlife Service, who will present to us some of the Canadian wildlife activities.

CANADIAN WILDLIFE SERVICE ACTIVITIES IN EASTERN CANADA

by

Joseph E. Bryant, Director
Eastern Region of Canadian Wildlife Service

Thank you, Bob. This paper will be another change of pace from the one Dan presented, in that it will deal a little more with specifics rather than with policy and philosophy. It was done deliberately, because I thought it might strike some notes of interest on things that we are doing which are a little different from things done here.

It's also quite a number of years since a member of the Canadian Wildlife Service spoke to your organization, and I thought it might therefore be useful to start out by bringing you up-to-date with the current organizational place of the Canadian Wildlife Service in the government of Canada. In 1970, a new federal department was established, the Department of the Environment. It was made up of bits and pieces from several other departments, and has now been consolidated into several arms, including Fisheries, Research and Management; Marine Science; Environmental Management; and a rather new one, Environmental Protection; and one called Atmospheric Environment Service, which is a new name for the old meteorological service. The Canadian Wildlife Service comes under the umbrella of Environmental Management, which also includes forestry, inland waters, and lands. The Assistant Deputy Minister in charge of the Environmental Management Service is John Tener, who is well known to some of you, at least, as the former Director General of the Canadian Wildlife Service. The new Director General of the Canadian Wildlife Service, named just two weeks ago, is Alan Loughrey. The Service is divided into two regions, east and west. The director of the western region, which encompasses the four western provinces of B.C., Alberta, Saskatchewan and Manitoba, and also includes the Yukon and Northwest Territories, is Dr. Andrew Macpherson, who has spoken to your group in the past. I'm director of the eastern region, which includes the six eastern provinces and, at the moment, also includes parts of the Northwest Territories as well, although that will change under the new reorganization. (It seems departments are always reorganizing.)

In July 1973, a year ago, a new piece of legislation which had been in gestation for about ten years was passed, called the Canada Wildlife Act. Up until that time, the sole legislative basis for the existence of the Canadian Wildlife Service had been the Migratory Birds Convention Act of 1917. With the coming of the Canada Wildlife Act, we now have a firm basis for undertaking research on species other than migratory birds when we are requested to do so by any of the provinces or territories of Canada. In the east, for example, we're currently involved in a cooperative caribou study in the Ungava and Labrador areas of Quebec and Newfoundland, which we're undertaking at the joint request of those two provinces. For many years, we also carried out studies of certain raptorial birds in western Canada, although they are not protected under the Migratory Birds Convention Act. We became involved in them through a Ministerial directive that the Canadian Wildlife Service should study the impact of toxic chemicals on wildlife in Canada. And while that was an important basis for the study, the presence of a firm legal justification now exists with the Canada Wildlife Act.

The Act also enables the federal government for the first time to involve itself in studies of rare and endangered species and to protect habitat required by them. All of these studies are to be carried out cooperatively with the provinces.

You are probably aware, and Dan alluded to it, that wildlife in Canada is a provincial responsibility and not a federal one, with the excep-

tion of migratory birds. Approximately 50 percent of our budget in the Wildlife Service is devoted to migratory birds. You can well appreciate, therefore, that it is the principal focus of our work. In order to give you some flavor of the kinds of things we're doing, I'd like to select a few projects for comment. My role as Director of the Eastern Region makes it appropriate that I confine my remarks largely to that area.

Bird Research.

Starting on the Atlantic coast, we have a project now in its fourth year to determine the distribution of seabirds at sea in the northwest Atlantic. Until the commencement of the study, our major work with seabirds had been largely confined to some major nesting colonies in the south and their immediate vicinity. We realized early on, however, that industrial forces which were resulting in vastly increased shipment of petroleum products into the Atlantic coast harbors and the development of petroleum resources in the High Arctic were going to have an impact on the seabird populations of the northwest Atlantic. We, therefore, undertook to study the distribution of birds at sea (up to approximately 300 miles from shore, although it varies) at all seasons of the year, in order to establish what species were there, when, and in what abundance.

The work still has several years to run, but we have already reached the point where we can produce an atlas of seabird distributions by degree block, by two-week intervals, throughout the year. That information will be very useful to assess the likely impact of oil spills and of proposed refinery installations and new shipping lanes in that area. The next phase of the study is to correlate the quantitative seabird data with oceanographic data, in order to assess the factors controlling the birds' distribution at sea and their roles in the pelagic food chains. To that end, our scientists have teamed with oceanographers and marine scientists. At the outset of our work on the Atlantic coast, it was pretty obvious that few if any of the marine scientists took any cognizance whatever of the role of birds in the marine food chain. But with the demonstration of the millions of birds involved, that attitude has begun to change.

Greater and lesser snow geese, Ross' geese, white-fronted geese, and brant breed largely in the Canadian Arctic. It is important from the standpoint of continental goose management that we have reasonable figures not only on total population of birds involved, but on the age structure and breeding success of each sub-population. We appear at last to have come up with an air photo census technique for lesser snow geese which enables us in the space of approximately one month to census all of the major nesting concentrations of that species. As you know, the lesser snow goose is dimorphic and the blue phase had proved particularly difficult to census from air photographs. However, the technique has now been found and appears to give excellent results when compared with very careful ground searches in experimental areas.

While the process is expensive and time-consuming in that it takes a lot of time to read the photographs, it appears that surveys taken once

every several years should be sufficient to enable us to follow population trends for management, particularly if it can be supplemented by an annual inventory of the population when it is concentrated along the coast of Hudson Bay around May 20th. In those surveys, we are teaming up with the provinces concerned. The first Hudson Bay spring coastal survey we ran was in May, 1973, when we found about 1.6 million birds, lesser snow geese, along the Hudson Bay coast. Subsequently, we found approximately 900,000 of them on the breeding grounds. This year in May, the coastal survey reported about 1.8 million birds, but it was actually rather fewer than we had anticipated, because of the excellent breeding season the year before, and it suggests that the winter kill, from a stock containing a very large number of young birds, may have reached a very high figure.

From a sport hunting standpoint in eastern Canada, the black duck has long held prime position. In Ontario and southwest Quebec, it has now been replaced as the principal species by the mallard, but in the rest of the eastern provinces it is still by far the most important. The black duck has been a notoriously difficult bird to census on the breeding grounds. We have, however, sponsored a continuing study of black duck in one localized area in the St. Lawrence estuary where it has proven possible to follow population size and reproductive success. We hope that the insights into the behavior of the bird in that area may give us some useful clues with which to extrapolate into other areas. The study is already showing that our previously estimated production, based on the loss of young between class I and class III broods, may have quite seriously overestimated production in the area.

Habitat Preservation.

We have a--what by U.S. standards is small--migratory bird habitat program in eastern Canada. It started in 1966 in a very small way, and although there was no specific legislation to cover it at the time, we now have that legislation. Priority lists at the outset were drawn up for the most important areas in each of the provinces, the lists being compiled in cooperation with the provinces concerned. Then, as funds became available, a start was made on the program. After five years, we finally got our land budget, our acquisition budget, up to a million dollars a year, and it's leveled off at that figure since. We now have 16 areas in the east which have cost us about two and three-quarter million, and there have been quite a number of areas--not quite so many as that--purchased in western Canada, including one purchased last year in British Columbia which cost us more than two million dollars alone.

The objective of the habitat acquisition program is very simple: it is to preserve migratory bird habitat. Management of each National Wildlife Area has that particular requirement at its core. Where uses of the areas by man are either beneficial to or at least do not detract from that primary purpose, other uses are permitted. Only two of the 16 areas in eastern Canada are Migratory Bird Sanctuaries. The rest are open to a wide variety of uses, including hunting.

In some of our maritime areas, the Canadian arm of Ducks Unlimited has very materially assisted us in building dikes and water control structures. They've spent several hundred thousand dollars in that area already. It has been very encouraging to see the increase in use by waterfowl in those areas.

Our prize area in eastern Canada at the moment is Cap Tourmente National Wildlife Area about 30 miles east of Quebec City on the north shore of the Gulf of St. Lawrence. It comprises approximately 5,500 acres. It is the principal resting and feeding area for greater snow geese on both the northward and southward migrations. At the turn of the century, the greater snow goose population stood at about 2,000 birds. It now stands at about 150,000. A large part of that increase has been due to the efforts of private hunting clubs, who held leases on the Cap Tourmente area for many decades. Part of the reason, of course, was also that no hunting of the species was permitted in the United States for a very long period, and, in fact, is not even permitted today. The only place the geese are hunted in North America is within a radius of approximately 50 miles from Cap Tourmente. We hold a controlled shoot in the area each year, based on a lottery draw.

The success story of the greater snow goose could very shortly lead to further problems, however. In its stopover on the St. Lawrence in spring and fall, its primary food is the rhizomes of Scirpus americanus. We are concerned that the race may shortly exceed the carrying capacity of the Scirpus beds to support it. A very marked tendency to field-feeding has shown up in the last year or so. Those of you who have had occasion to be concerned with irate farmers who either had their fields damaged by birds or thought they had, will appreciate the concern we feel in that regard. The greater snow goose tends to be a rooter rather than a grazer like the Canada goose. Whether it will in fact cause any serious agricultural problems we do not know, but we are undertaking some preliminary research and experiments to find out. If the natural range on the St. Lawrence will support a population not importantly larger than the one we have today, it is apparent that population controls in addition to those currently available in Canada will have to be found.

Prairie Crop Depredations.

This might be an appropriate time to mention the prairie crop depredation program about which a couple of you have spoken to me last evening and this morning. You will appreciate that this particular problem is outside my geographic area of responsibility, being confined to the provinces of Manitoba, Saskatchewan and Alberta. It seemed inappropriate, however, to speak to this forum without mentioning it, and I therefore asked Dr. Macpherson, Director of the Western Region, to prepare a few notes for me. In addition, Rich Goulden, representative from the Manitoba government, is here and has offered to help if there are any questions with respect to this later.

Subsidized provincial insurance and compensation schemes respectively have long been available in Saskatchewan and Alberta. Manitoba has also had a program for several years, designed to divert ducks from farmers' fields

to feeding stations. In 1972, the federal government undertook to share with the three prairie provinces the costs of preventing damage and of compensating farmers for losses which could not be prevented. The success of the 1972 program led to a four-year agreement in 1973 for the 1973 and subsequent crop years. Last year, grain losses were very severe and damages being claimed for crops in Alberta alone approached the value of one million dollars.

The intent of all governments signatory to the crop depredation agreement is to work out a method to deal with the problem as an insurance risk with subsidies, as now, coming from imposts on hunting licenses and from other public revenues. Additionally, it is intended to continue the program of acquiring trouble spots and of turning them into feeding areas, of buying other crops as required to contain the feeding ducks in a particular area until the crops are mostly in, of establishing diversionary feeding areas and advising farmers how best they can contribute to the reduction of damage on their own particular fields.

The federal government contribution to the prevention and compensation program is one million dollars for each year of the agreement.

Mammal Studies.

I'd like to say a bit about some of our mammal studies which are, again, a little different. A project of very long standing in eastern Canada is a study of polar bears. While we normally think of the polar bear as belonging to the High Arctic, the species does inhabit the coasts of Manitoba, Ontario, Quebec and Labrador.

A decade ago, it was conventional wisdom to say that the polar bear was a holarctic species, the members of which migrated around the whole of the Arctic basin. That is to say, that a bear seen in arctic Russia one year might be seen in Greenland the next, maybe Canada the next, and on to Alaska the following year. Our research has pretty well demolished that belief. Although polar bears do move fair distances--probably on the order of 300 or 400 miles a year--they nevertheless comprise reasonably discrete population units, and therefore can be managed on a subpopulation basis. Based on many years tagging and tag recovery, we are able to demonstrate, for example, that polar bears inhabiting James Bay are never found in northern Hudson Bay.

Management of polar bears in Canada is coordinated through a technical and an administrative committee comprised of members from the Yukon Territory, the Northwest Territories, Manitoba, Quebec, Ontario, Newfoundland and the Canadian Wildlife Service. In addition, there is an international committee under the auspices of the IUCN composed of the United States, Canada, Denmark, Norway and Russia. By far the largest national component of the world polar bear population resides in the Northwest Territories. Its government for many years has had a quota system in effect which allows a given

number of bears to be taken by each Eskimo community. The system seems to be very effective and the population of bears in the Northwest Territories appears to be in no danger at this time. In 1973 an international convention on polar bears was negotiated among the five nations which harbor the species. The effect of that convention will be to give international recognition to the need for research and management, and to give protection to the bears when they are outside national boundaries.

We also have several other studies underway in the High Arctic, mainly concerned with Peary caribou and muskoxen and their habitats. Peary caribou live only on the Arctic islands. They are a distinctly smaller race than barren-ground caribou, and usually are quite a bit paler. Their social behavior also appears to be quite distinct from the mainland race, and also quite distinct from woodland caribou.

The first attempt even to determine their presence or absence on the Arctic islands was made in 1961 by John Tener. From then until our studies started 11 years later in 1972, there had been no work whatever done on them. All we knew was the result of Tener's one sweep-over survey.

On the particular group of islands on which we have been working for the last three years, it appears that the number of caribou have decreased very markedly since 1961, and with the exception of one island, the numbers of muskoxen have risen. This is rather interesting because, with the exception of the same one island, the area lies entirely outside the hunting range of all Eskimo communities in the Canadian north. Changes in population numbers must therefore be attributed to causes other than hunting.

At the moment, we can only speculate on what those causes might be. Unavailability of forage due to snow pack and ice storms is one possibility. Severe storms at the time of the rut or at the time of calving is another. Muskoxen appear to calve over a period from March through May, whereas caribou calve probably, the Peary caribou--although we're not certain of that--but they probably peak in a week or ten days in late May or June. While there is undoubtedly a long-term survival benefit for the caribou in having a short calving period, there could very well be short-term disadvantages to it. We found in the case of barren-ground caribou that a short period of extremely inclement weather during the peak of calving, which is a very short period, can have devastating results on the survival of any one year's calf crop.

Allied to the studies of ungulate populations in the High Arctic are associated studies of the plant communities used as forage by the species. All of these studies are given added impetus because of the probability of a major gas pipeline from the High Arctic islands to southern Canada. In order to advise our government and the potential pipeline builders of the hazards associated with pipeline construction and operation, it is essential that we know quite a bit about the populations of animals involved, their social behavior, and their seasonal movements. We also need to know their habitat needs and their susceptibility to disturbance by industrial man.

Environmental Assessment.

Last winter, the Canadian government announced a policy that would require environmental impact assessment statements to be prepared in all cases where major projects which would likely have significant environmental effects were undertaken by a department of the federal government, with the assistance of federal government funds, or on federal lands. The Department of the Environment has been given the responsibility to implement that policy. Except in projects of its own initiation, however, it will not be expected to undertake the assessment studies. Its responsibility will be to ensure that such studies are carried out by the proponent of the project when required, to ensure that the studies are adequate, and to ensure that necessary environmental precautions are carried out by the proponent in furtherance of each project.

In some cases, however, it will be necessary for the Department of the Environment to carry out major studies of its own in relation to a particular project in order to have the necessary scientific background to judge the proponent's impact assessment report, and to write guidelines for the project itself. A recent case in point has been the Mackenzie Valley Pipeline where the federal government has had to spend many millions of dollars to establish its own baseline data in order to meet federal responsibilities for resources and the environment.

In my own region, the James Bay power project in Quebec is another case. The Province of Quebec is currently engaged in the development of hydro-electric power from several rivers draining into the east side of James Bay. The development is expected to be the largest single hydro development in the world when it is completed. Estimates of total cost range upwards from five billion dollars, and the last figure I saw a couple of weeks ago was 12.3 billion. The Wildlife Service has been engaged for nearly three years in studies of the impact of that development on migratory birds.

The problem is complex because it involves not only the biology of the birds, but also the sociological impact on the native Indian and Eskimo populations of the region. The project will result in the opening up of roads into an area which has long been very difficult of access from southern Canada and the United States, and therefore the local population has had very little protracted contact.

Our studies confirm that waterfowl densities in the interior are low. The major impact will be close to the coast, where large numbers of geese, ducks and shorebirds by the millions congregate in the spring and fall, and where nearly all the people of the region live. In this case, because the area was so inadequately known, the federal government in cooperation with the provincial Crown corporation responsible for the project has undertaken a several million dollar program on baseline studies in a wide variety of disciplines, including wildlife and fisheries.

Atomic power reactors are of a type which requires heavy water as a

moderator; in that respect they're different from the type of reactor which you use in the U.S. The production of heavy water produces a lot of heat, and, of course, the atomic reactors themselves produce a great deal of heat. We, in common with the rest of the world, are certainly going to be faced with more and more problems of waste heat disposal. Although some research has been done in the beneficial use of waste heat, and there are some effective projects actually being run, a great deal more thought is going to have to be given to the problem in the future.

One of the small side problems which we face, and which I'm sure all northern states will face, if they don't already, is that of waste heat keeping normally ice-covered areas ice-free during the winter. Waterfowl may find themselves trapped in such areas if they linger beyond the time at which the migratory urge has any affect.

One problem which I guess all science administrators face, and for which I don't know any solution, is that environmental assessments tax our resources to the breaking point, and we are more and more hard pressed to maintain our research competence at the same time. The effectiveness and credibility of wildlife scientists in environmental matters is directly related to our competence in research, not only of the quality of the research, but also in the subjects selected, and the manpower and budgets provided.

Thank you.

PRES. HERBST: Thank you very much, Joe. Are there any questions?

PETROSKEY, MICHIGAN: Do you have any kind of a federal aid in wildlife restoration or a fisheries program in Canada? If so, what is the source of funds?

BRYANT: No, we have nothing comparable to the Dingell-Johnson or the Pittman-Robertson programs in Canada. Canada, with very minor exceptions, has no way of earmarking tax funds for particular projects.

PRES. HERBST: Any other questions?

VESALL, MINNESOTA: Joe, what is the status of the drainage situation in the wetlands in Canada now? Is this increasing rapidly?

BRYANT: I don't have any hard figures on it, but it certainly is a problem. And it isn't just for agriculture. We're concerned that some of our key marshes are being lost, for example, to marina or cottage developments, which are booming in Canada. We're concerned that marshes are frequently looked upon as a good place to dump sewage wastes or garbage; they are also sites which are easily filled for industrial purposes.

PRES. HERBST: Any further comments?

BARBEE, NEBRASKA: Would you expand a little on your aerial survey

technique with the lesser snow geese.

BRYANT: The technique is really quite simple. It consists of using a special air photo aircraft, with a camera, I think with a six-inch focal lens, flying total coverage of each major known nesting colony of the lesser snow geese. The colonies, of course, change in size from time to time, and it is first necessary to take a scouting flight to pattern the area, and then strip it, so you get 100 percent coverage at about 4,000 feet. Then, in order to do the blue snow ratio counts, a sample is flown at about 1,000 feet, to get a large image on which the blues can be separated from the whites. Then that ratio is applied to the total colony size. We're satisfied that within any one colony, the distribution of blues and snows is sufficiently uniform that a relatively small sample count for ratio is adequate to apply to the total colony. But each colony is different.

PRES. HERBST: I'd like to ask, do you have an endangered species program in Canada comparable to what we're faced with here?

BRYANT: No, we don't. Under the Canada Wildlife Act, which is very new, there is provision for the federal government to involve itself in rare and endangered species. But, as I've mentioned at the outset, wildlife in Canada, with the exception of migratory birds, is a provincial responsibility, and some of the provinces--Ontario is one, and it may be the only one at the moment--have a rare and endangered species act, and I expect that other provinces will follow suit. The Canada Wildlife Act simply gives the federal Minister power to enter into research on rare and endangered species, when requested to do so by a province, or to acquire habitat required by such a species, when requested by the province.

PRES. HERBST: Any further questions?

ELLIOTT, COLORADO: In your acquisition of waterfowl areas, I assume some of them were privately-owned lands. Do you use condemnation? Do you run into any opposition from local people about buying up more land for governmental use?

BRYANT: We haven't, as yet, run into any important resistance. We don't use condemnation. Our Minister has said, quite bluntly, that he has no intention of using it, except in those cases where it is required to clear a title. There are places, particularly in the maritime provinces of Canada, where titles are very, very obscure. People simply can't prove that they own or don't own a piece of ground, but it is common knowledge that "Joe Blow" owns this piece of ground, though it changed hands five generations ago and he hasn't got anything to prove it. So, if it is agreed all around, we can expropriate in those circumstances in order to pay the individual what is his due. But as a policy of acquiring land, we do not use expropriation or condemnation, no.

ELLIOTT: Do you appraise the land at arrive at an appropriate value?

BRYANT: That's right. Well, actually, it's done by another government agency, but it's done by the federal government, yes.

PRES. HERBST: Any further comments?

VESALL, MINNESOTA: I have another question. Joe, do you detect a change in thinking in regard to the status of the timber wolf in Canada as to whether or not it might be a threatened species? Is there more interest in protecting the timber wolf than there was a few years ago?

BRYANT: I wonder if I could "chicken out" of that one and ask either the Ontario delegates or the Manitoba delegates to comment on that.

JOHNSTON, ONTARIO: Up to the fall of 1972, Ontario had what could be considered an old-fashioned piece of legislation called the Wolf and Bear Bounty Act. We found it quite repugnant. However, the public attitude at that time was that it was needed. We worked away at it over time and, essentially through the lobbying of a naturalists' group--and in fact some hunters--it was repealed the fall of '72. Then all hell broke loose. It was replaced by an act called the Wolf Damage to Livestock Compensation Act where we pay for damages, proven damages, done by wolves to livestock. Dr. Bark (sp.?), whom many of you are familiar with, made a comment once that the \$60,000 or so we pay each year is a small price to keep the lid on.

Since then we have two active groups. We have the pro-wolf and we have the anti-wolf, and we're caught in the middle. The wolf is not endangered. The wolf or the coyote are not endangered in Ontario; we have an extremely healthy population of timber wolves estimated at about 10,000. Our coyotes are increasing in number and, of course, causing increasing problems with game and sheep depredation. The program now is costing us considerable amounts of money; last year it cost \$51,000 in damages to landowners, and that excludes administrative costs.

We're working away at it, and I would say that we have an extremely interesting urban/rural split. By and large, rural people hate wolves, and by and large, urban people love them, and we'd like to take the middle of the road. I swing towards loving them. I try to keep rather objective about it. There are wolves that cause problems.

Where are we going? We are trying to increase our predator control on specific animals that are causing landowners specific problems. We do not believe in blanket coverage or eradication which is being requested by certain people of our community. We say, OK, if you've got a problem animal, let's deal with it. We have asked for increased funding to do this.

PRES. HERBST: I'd like to close this morning's session on a philosophical note for you to contemplate over the lunch hour, and it's one of my favorite stories. I've shared it with the department people who're in the

room, but I'm sure some of the rest of you haven't heard it.

There's another group that's faced with controversies and decisions, and that's politicians. One of my favorite ones here in Minnesota had finished giving a campaign speech and, when he was all done, a gal from the audience raised her hand and she asked him how he stood on the question of whiskey. This is how he answered her. He said, "I had not intended to discuss this most controversial subject at this particular time. However, I want you to know, I do not shun a controversy. On the contrary, I will take a stand on any issue any time regardless of how fraught with emotion it is.

"You've asked me how I stand on whiskey? And this is just exactly how I stand on that issue. If, when you say whiskey, you mean the bloody monster, the poisonous brew, if you mean the evil drink that breaks up homes and literally takes the bread from the mouths of little children, if you mean the drink that topples the Christian man and woman from the pinnacles of righteousness into the bottomless pit of despair and hopelessness, then certainly I am against it with all the powers at my command!

"But, if, when you say whiskey, you mean the philosophical wine, the oil of conversation; if you mean the ale that is consumed when good fellows get together that puts a song in their hearts, laughter on their lips, and the warm glow of contentment in their eyes; if you mean Christmas cheer; if you mean that stimulating drink that enables man to forget, if only for a little while, life's great tragedies; if you mean the drink the sale of which pours millions of dollars into our treasury, which provides tender loving care for our pitifully aged and infirm, which builds highways, schools, and hospitals; then certainly I am for it!

"This is my stand and I will not compromise."

* * *

Reconvened Tuesday p.m. Session

PRES. HERBST: If I can get your attention again, we'll call the afternoon session to order. At this time, I'd like to introduce Harold "Bud" Jordahl, chairman of the Wisconsin Natural Resources Board.

ISSUES IN STATE RESOURCE MANAGEMENT

by

Dr. Harold C. Jordahl, Jr., Chairman
Wisconsin Natural Resources Board

Thanks very much, Bob. I won't comment on the issues as they're being presented by several investigatory reporters for the Milwaukee Sentinel. We now have enlisted special counsel to make an analysis of findings of

facts and conclusions to advise our Board on that question. We turned to the University of Wisconsin for that advice and counsel, and I'm sure, being a member of the faculty of the University, that it's going to be totally objective.

It is a pleasure for me to be back here amongst friends; it's been probably ten years or longer since I've participated or attended a meeting of this association. It's a delight to once again be meeting with you. The decisions and actions of this group and your policy-making boards and commissions are highly significant to the quality of life in our states, to our people and to our visitors. This quality in no small measure rests in our collective hands.

I chose today to express my views on several issues in natural resource management administration. The issues are many and varied and certainly cannot be solved or perhaps even totally understood in the brief period we will be at this conference. My perception may not be your perception. Perhaps, however, we can, through this discussion, recognize several common problems which will assist us in meeting our long range goals.

Because we are public agencies, one of the most obvious issues is the need to increase meaningful public participation in our policy decision process. Professional resource managers trained in a specialty often have tunnel vision. An objective is established and a course of action may be set without the benefit of public understanding and endorsement. The results of these types of actions can be devastating! I certainly do not mean to imply that public opinion should be the overriding force in the decision-making process, but rather that citizens must be accorded the forum for expression of their views as well as the opportunity to receive information from resource agencies that relates to their areas of interest and concern. Without public acceptance, obviously our plan will fail.

Coupled very closely with public participation in decision-making is the need to increase public understanding of and support for policies once adopted. A strong, effective information education program is essential to any agency, but especially so when we are dealing with the complexities of environmental issues. Perhaps the most critical need in the information and education effort will be geared to getting citizens on the same wavelength in their efforts to achieve common goals. In other words we must convince preservationists, conservationists, consumptive users of resources, the hunter and fisherman, the bird watchers, protectionists and environmentalists that while they do not walk the same path, their goal should be the same. And we can't do the educational task alone. Our staffs and budgets are not large enough. Moreover, as regulatory and programmatic agencies, we will always have a bias which tends to warp educational thrusts.

Rather, I believe we can, with relatively small staffs, act as both a synergistic and catalytic agency, utilizing, for example, the professional help in the Vocational-Technical Adult Education system, public and private schools, and especially University Extension organizations. We have, for

example, in Wisconsin more than 700 faculty, both county and campus-based, in Extension education. Many of these faculty in one way or another program in "environmental education." Extension is then, more than the mid-day farm report, more than the agricultural agent, and keep in mind that agent who can program in environmental matters sits next to the agency and extension education commissioners of the County Board, no small force in rural regions where much of our work is done. (Joe Tuss for example--Taylor County Wild Life area.)

In our area of responsibilities, one of the most important issues facing us today is a firm, concise and decisive land use policy and ethic. Leopold spoke of it--many others since have echoed his words--some have put it into practice--but as yet we are still a long, long way from achieving or even convincing people that land and water are the most precious commodity we have and the most in need of our attention if we are to have a quality environment.

We continue under the premise that land is a commodity to be used and abused at individual discretion under the pioneer theory of first come-first (and maybe only) served. A much broader public interest needs serving. In the Midwest we have a precedent under the Northwest Ordinance that deals with navigable water--but it ends there. The general interpretation of the constitution and state statutes does not extend the same constraints on the use of land or nonnavigable waters. It is obvious that this is the weak link in the chain that protects our natural resources for all of the people.

Part of the apparent reaction against resource planning and land use control can, no doubt, be ascribed to the current general distrust of government. Watergate, the "energy crisis," spiralling inflation, rising unemployment, and the likelihood of a recession, tend to make the average citizen wonder if government can do anything right.

A certain element in Wisconsin, closely allied with the John Birch Society, has seized on this general unrest to try to undo regional planning in Wisconsin. By every emotion-packed means at their disposal, and using techniques which exploit uncertainty and fear, these groups have been arguing their case before local town officials, urging them to withdraw from regional planning commissions and the state, national, and international conspiracy leading towards world government. And they are having some success as towns petition the state to withdraw. Although their effects will not destroy regionalism in Wisconsin, they make dramatic the shortcomings of resource planners and planning commissions and natural resource agencies in developing a constituency, in educating citizens to the advantages of planning and in effective communications.

We have a bad habit of talking in generalized abstract planning terms, and have not yet learned how to translate these terms into citizens' lives and the quality of their environment; too much emphasis is placed on why we plan; it can mean, for example, the advantages of joining together to deal

with a regional housing problem; to improve public services such as police and fire protection, and yes, the daily task of disposing of household waste; the need to collectively tackle a water pollution problem in a river which crosses political jurisdictions; the advantages of a land use control program which saves a marsh. Put yourself in my position when I was recently traveling with our Governor to a conference in Cleveland. He turned to me and said, "You're being interviewed on t.v. in Wausau, Wisconsin, and the announcer gives you 90 seconds to explain why regional planning is important in that part of the state..." How do we respond?

Despite this temporary backlash against government and the lack of positive support generally, there is a sizable, latent base of citizen concern and support for land use legislation and land use controls. A colleague of mine, Peter Amato, recently completed a study in Wisconsin on "Land Use Social Values and Environmental Policy." Part of the study included a telephone interview of more than 3,600 respondents randomly distributed throughout the state in proportion to population. Five questions concerning attitudes toward public control of urban development were asked. The responses indicate more support for controls than one would have expected from some of the attitudes I noted earlier.

For example, 71 percent "agreed or strongly agreed" that state and local government should regulate "the way cities are spreading out." More than 86 percent "agreed or strongly agreed" that "environmental quality should be protected through stricter laws on how people and industries use their property." It seems as though the general public may once again be way ahead of our legislators in recognizing their own problems. The trick, of course, is to catalyze this latent support into political action; leadership by both resource planners and politicians is required to relate and articulate those feelings of concern, often times only vaguely felt in people's minds, into an issue or series of issues requiring action.

There are other signs. The courts are also acting friendlier toward controlling land use, or perhaps more correctly, land abuse. In a recent case where a landowner attempted to have Wisconsin's shoreland zoning law overthrown, the Wisconsin Supreme Court said, in part, "...that it was entirely within the power of the state to restrict the uses of land compatible with its nature...that the limitations of the property rights doctrine are those indigenous to the land in its natural state and as such, private rights are subordinate to the rights of the public as a whole and do not constitute a constructive taking since they are rights which the public already had."

The court further ruled: "...Swamps and wetlands were once considered wasteland, undesirable, and not picturesque. But as the people became more sophisticated, an appreciation was acquired that swamps and wetlands serve a vital role in nature, are part of the balance of nature, and are essential to the purity of the water in our lakes and streams. Swamps and wetlands are a necessary part of the ecological creation and now, even to the uninitiated, possess their own beauty in nature." I should add that the issue

related to the proposed destruction of a wetland adjacent to a navigable river, and the trust doctrine weighed heavily in the decision.

There are several clear messages in these examples. One, there is some public support for land use planning and regulation. Two, there is currently a strong vocal opposition to land use control. Three, there is a widespread lack of understanding as to what planning is all about. In my judgement, resource planners must give top priority to communicating what planning means before the noisy opposition to land use control undermines public support mentioned in message number one. The question is how.

I believe that political leadership must more clearly articulate citizens' needs. Governor Lucey did this two years ago when he appointed the Wisconsin Land Resources Committee, chaired by former Governor Knowles. The committee, of which I was a member, was composed of people of as many different views on land use as one could imagine. The cover letter of the final committee report called for "selective state involvement in those land use decisions concerning critical statewide environmental and urban development issues." Legislation was introduced but, unfortunately, it was later renounced by the committee chairman, in part because there was a loss in translating the report into legislation (the communication gap again?).

As I think back over that experience, it would have been more effective to have continued the committee for another full year if necessary to hammer out in detailed legislation showing exactly what was intended, rather than relying on the rather broad set of principles and sweeping statements contained in the report, which unfortunately found their way into legislation. Furthermore, few people, other than planners, could understand the committee's report in terms of their communities. The present theory of land ownership to do as one pleases needs reexamination and resolution as a top agenda item of the 1970s.

I would be remiss if I didn't discuss with you the impacts the anti-hunting groups are having on our job of managing natural resources. There is no need for me to go into the details or the potential influence of this group. They have money, influence and determination. They do not recognize (as yet) that while we are on different roads, our goals may be the same. We must understand each others' motives. I must admit I don't always understand theirs. I try.

I do know however that the desire to hunt and fish is innate in many of us and the extent to which we are allowed to pursue this desire contributes to the psychological well-being of a large number of people. I also acknowledge that we as leaders in resource management have the responsibility to put hunting and fishing on the highest ethical plane. To do otherwise jeopardizes the perpetuation of these activities. In Wisconsin recently we had a bill before the legislature that created as much controversy as abortion, women's rights, power plant siting and numerous other important pieces of legislation. The bill prohibited baiting of bear. The passion of the debate over this issue was unbelievable.

Upon the recommendation of the Natural Resources Board, the Governor vetoed the bill, but in his veto message he said, "To those who tell us that they're concerned about saving the bear from senseless slaughter, I have asked, 'Did you speak up when the Navy was attempting to place Project Sanguine in northern Wisconsin? Is it more cruel to kill a bear with a gun than it is to slowly starve him to death by removing his forest cover and breeding grounds?' And, to those who tell me their primary concern is in saving the sport of bear hunting, and that this means saving the bear as well, my questions would be the same. The hunter who is unwilling to exchange his red shirt for a green shirt once the hunting season is over, who is unwilling to give environmental concerns priority over a narrow commitment to self-interest, cannot see the forest for the trees and may find eventually that he has no forest left to retreat to."

Hunting, fishing and similar activities have a place in society but these pursuits must be conducted in such a manner as to reflect favor and not disfavor on humanity. To those who say this is impossible--that nothing but disfavor can be reflected--I commend to their reading an excellent article by C. H. D. Clarke, "Autumn Thoughts of a Hunter," published in the Journal of Wildlife Management in October 1958. Clarke said, "The voices that have been raised against us have been charged with emotion, coming, not as they pretend, from philosophical heights, but from tight compartments, insulated from reality."

I also particularly like his closing remarks in that article where he summed up his thoughts as follows, "Hunting remains, as it was in the beginning, completely assimilated to the basic processes of organic nature, in which death and life spring from each other."

"It is because of this that hunting is still a life-giving, wholesome sport. Play, whether in ritual, law, religion, games or any other of its manifestations can lose its roots and become degenerate. Hunting could lose its roots, too. Those who love it must clarify their own ideas as best they can, and become eternally vigilant, especially as the most artificial aspects of human culture spread like a cancer. Above all, we should esteem in ourselves and in our companions that maturity of spirit which alone places the right to hunt beyond question."

Let me talk now about resource agency organization. In order to carry out our job as resource managers, a well-planned and functional organization is necessary. In my opinion, today's environment can only be preserved through a coordinated decision-making process that is founded in a broad-based organization. Wisconsin took the giant step in 1967 as part of a reorganization of state government. The reorganization reconstituted about 90 separate state agencies into about 25 departments. Other states are going through the same process as we are in Wisconsin, and many more will be.

Making it work in Wisconsin has not been an easy task. I was quoted accurately in the Milwaukee Sentinel recently that our present organizat-

ional structure is a hell of a lot better than the old one and, further, that it would take a decade to really make it work. (This is true, but after reading the quote to my wife and being overheard by my son, I regretted the expletive and only wished I could have used the deleted technique.)

One of the primary reasons for the natural resources consolidation was to obtain coordinated state policy and decision-making for the natural environment. If the natural environment is truly a system in which a change in one of its components impacts on its other parts, it was assumed that the most rational way to regulate, protect and manage this environment was to create a consolidated agency that would strive to minimize these impacts. The Wisconsin consolidation is an attempt to match the organization of state government to the organization of the natural environment. It assumes that the closer the match, the better the results. Such organizational consolidation has been referred to by some as an "ecological imperative."

Another obvious reason was to reduce the costs of government. A consolidated department, for example, could probably get by with a single computer and EDP staff, where several separate agencies might need several computers and supporting staffs. A single agency would only need one budget and planning staff, one personnel unit, one payroll section, etc., rather than a multiplicity of such service-type units that would be required by several separate agencies. In other words, the ratio of administrative costs to actual program costs would be reduced.

Policy direction to the department is provided by a seven-member, part-time Natural Resources Board of which I am the current chairman. Board members serve for overlapping six-year terms. We are nonsalaried and appointed by the governor with the advice and consent of the senate. We meet every month. The board is structured into three operating committees which meet at least once each month.

We currently employ 1,800 permanent employees, most of whom are specialists such as environmental engineers, sanitarians, wildlife biologists, foresters, attorneys, accountants and planning analysts. The biennial budget of the department is about \$185,000,000.

The field operations of the department are divided into six districts whose boundaries coincide with the administrative districts created by the governor for all state agencies. Each of the six districts is administered by a district director who is responsible for the entire mission of the department in his district. The six district directors report directly to the office of the secretary. Districts are further subdivided into smaller areas.

Our experience with this type of organization has demonstrated its effectiveness in many ways. Rapid responses with adequate work forces to environmental emergencies such as oil spills and forest fires are the rule. Such a structure brings the various specialists together and insures that they are working together as a team capable of solving complex environment-

al problems.

The line-staff structure is also reducing the cost of regulating, protecting and managing the natural environment. We know this because we have had to prepare fiscal notes for the legislature for several recent bills that would separate away certain activities and create separate departments.

For example, a recent bill that would create a separate department of environmental protection (primarily pollution abatement) has a fiscal note attached to it that indicates that such a legislation would cost the public an extra one million dollars per year if the current level of service were to be maintained. This additional cost would be incurred because administrative services would have to be duplicated and because the additional personnel would be required by the new agency to take the place of the coordinated assistance furnished by the work force that remained with the former agency. We have estimated that the additional cost to the taxpayer, assuming the current level of service, under the pre-1967 organizational structures, would run into several million dollars per biennium.

Let me assure you, however, that initially and even today all is not harmony and light with such a consolidation. For the first two or three years there was little or no saving, some program disruption, and some serious morale problems among our employees. Without skillful leadership, such consolidations could easily falter and public clamor could demand a return to former patterns of administration.

We are seeing manifestations of this now in Wisconsin, but out of the current public and political concern, I am confident we will end up with a stronger, more effective and efficient system. We have the team in the interdisciplinary staff. The trick is to keep the team glued together while at the same time preserving the sense of identity and purpose each professional group has to its specialty. It's with regard to the latter that we have problems; communications, in house, and in-service training is critical.

One of the principal objections to consolidation is that public input into decision-making is reduced by merger. Separate departments, it was argued, supported by separate special interest groups, could champion their cases in the public forum. This would lead them to better decision-making because of more public involvement. Obviously, such an arrangement might also tend to delay or suspend decision-making too. (The argument is reminiscent of those made against the merger of the Departments of the Army and Navy into a single Department of Defense in the late 1940s, and without question the argument against merger has merit.)

To deal with that question, the legislature created at the same time a public intervenor in the State Department of Justice. The public intervenor may on his own initiative or at the request of others formally intervene in almost any environmental hearing of the Department of Natural Resources for the protection of "public rights." Personnel of the DNR shall upon the request of the public intervenor make such investigations, studies,

and reports as he may request in connection with such public hearings, either before or after formal intervention. The law also provides that any division of the DNR may also present its point of view at a hearing.

The concept is valid; the intervenor function needs substantial strengthening in staff and perhaps separation from the Justice Department and the shifts in political winds. The board and the department also receive public contributions from 25 advisory councils composed of citizens who make recommendations to the board in their areas of concern. For example, we have advisory councils for wild resources, fisheries, recreation, water resources, forestry, scientific areas, natural beauty, and many others. To include these groups in a more effective way in the policy process and to avoid the perfectly normal process of bureaucratic co-optation, we have enlisted the aid of University of Wisconsin experts in public participation processes such as nominal group and modified del fi techniques. Now, we may end up not agreeing, but I believe we'll have a more accurate fix on citizen concerns.

The governor also is obviously a powerful force in the decision process. Not only does he appoint members of the board, but he influences budget requests of the department and personally approves regulatory policies, orders and contracts.

The legislature also gives strong direction to the department in the form of legislation, public hearings on natural resources matters, resolutions, budget review and approval, and review of regulatory policy made by the board.

What I am saying is that I believe consolidated state natural resources departments can be created to better protect the environment and achieve economies, while increasing public contributions to the decision process. The imaginative use of public hearings, the public intervenor, the advisory councils, and our general response to the public can be joined to insure decisions which reflect public concerns.

Problems over enforcement of our pollution laws surfaced last year, which again was a manifestation of our geographic organization in contrast to the old functional line organization. The board then appointed a special task force of people knowledgeable in natural resources organization and enforcement to advise us.

After careful study of the warden situation within the department, the task force submitted a series of conclusions and recommendations to the department and the board. Let me briefly note them.

One- That the enforcement of natural resources laws and regulations has become increasingly complex in the past few years, and many enforcement decisions are now of the type requiring highly skilled technical input, especially in the pollution and water regulation areas.

The department should use fully all the specialized personnel available

to it in the development of joint decisions on how best to enforce the law in these technical and complex cases.

Two- There is general agreement that a substantial number of enforcement actions should be removed from criminal prosecution and the use of the forfeiture type of proceeding should be substituted, principally involving those enforcement actions in such categories as parks and recreation, fish and game, and environmental protection. This effort is now underway and we hope to have affirmative action in the 1975 legislative session.

Three- In keeping with the increasingly technical complexities of department enforcement actions, the task force recommended that training efforts for department law enforcement officers be accelerated to upgrade the enforcement skills of personnel other than wardens.

Four- Since law enforcement within the department is no longer limited to the enforcement of game and fish laws because of greatly expanded responsibilities of enforcement in environmental regulations, and the increase in other recreational activities such as boating and snowmobiling, we need a broader financial base.

Five- The task force was of the opinion that the decentralized type of organization now in use by the department with all field activities in each district under the control of a single district director is the best type of organization which can be expected to manage the enormously complex field operations of the department with any degree of efficiency.

The combining of the Madison office enforcement activities into a single Enforcement Division (as was recently done) will contribute greatly to the proper coordination of the total enforcement effort.

We must remember the enforcement of environmental cases is not a simple, cut-and-dried procedure. The law often provides more than one enforcement option and often the sanctions provided in simple criminal proceedings result in small fines having no real deterrent effect.

Basically, we require the warden to advise the district director before making an arrest in such cases to determine first whether the entity involved is already under orders and second to determine the most effective option under the law.

In those cases involving specific one-shot pollution cases, such as the dumping of a load of some type of pollutant into waters, the warden is empowered to act immediately.

If action in the local courts is the best course to follow, we follow that course.

In other cases, referral of the case to the Attorney General's office may be the best course of action and, while slower, could result in much heavier penalties against the offender...a more effective way to gain com-

pliance with the law.

A comprehensive training program on these matters as requested by the wardens both for themselves and for other technicians involved has been underway for some months.

My time has run out.

Let me note in closing other issues deserving attention:

1. The development of a responsible and responsive press to report accurately the complexities of environmental problems. The role of the universities is crucial in this;
2. Institutional support for "environmental activists";
3. The use of our land acquisition programs as a tool for implementation of broader comprehensive land use plans and the important relationships now evolving in coastal zones, 208 and air quality planning;
4. The relationship of policy and politics to resource decisions and the need for new or improved institutional structures;
5. The role of political campaigns to resource issue identification;
6. Institutionalizing resource conflicts for wise decisions;
7. The need for new environmental or conservation coalitions, especially as we become an urban society;
8. The need to deal more effectively with the problems of minorities in our society.

Thank you again for affording me the opportunity to visit with you.

PRES. HERBST: I'll take two or three questions for Bud before we move along. Any comments or questions?

PETROSKEY, MICHIGAN: You talked about public input, Bud. How do you determine whether you have a total broad base of public input?

JORDAHL: How do we determine whether or not we have a broad base of public support or are we still listening to special interest groups? I guess there is no good, definitive answer other than very broad-based attitudinal surveys which cost an awful lot of money, right? On a continuous basis, we obviously can't do that. So I think this is the role of the policy maker. I think it's important that he recognizes that he's getting those interest groups which have legitimate expressions of concern, and then he's got to try to intuitively make decisions reflecting that kind of

citizen input. Now, a politician finds out in a hurry, because people won't vote for him if he doesn't use the right kind of decision-making process. But we're insulated from that and they can't fire us.

PETROSKEY: I would agree with you. You've got to use your best judgment and common sense, I think, after weighing what has been put out.

PRES. HERBST: Any further questions? If not, we'll move on to Bill Oemichen, the Assistant Soil Conservationist for the State of Minnesota.

SOIL, WATER AND WILDLIFE MANAGEMENT

by

Bill Oemichen

Assistant Soil Conservationist for Minnesota

Thank you. I consider my opportunity to make this presentation to you a unique privilege. I'm not a biologist, but a forester by training with a farm background and about 20 years experience working with landowners in planning and applying soil and water conservation practices.

I also have a strong and sometimes distracting interest (as far as my wife is concerned) in hunting and fishing. I own a springer and a golden retriever and that attests to my interest in hunting.

We rarely see ourselves as others see us, but I want to briefly discuss how we in the Soil Conservation Service (SCS) see ourselves. We are an agency with broad responsibilities and multiple objectives. We provide technical assistance to individuals, groups and government units to conserve, develop, and utilize soil and water resources with the expertise of agronomists, biologists, foresters, engineers, soil scientists, and other specialists. We are a "people oriented" agency, and we assist different interest groups through locally organized soil and water conservation districts. Sometimes the interests of these groups are at odds with fish and wildlife interests.

In my present position, and even before that, I am aware of the flak that has occurred between the SCS and people like you. This has usually occurred when the people we worked with were either not concerned about wildlife or viewed it differently. I'm not going to look back, but I can tell you it has always been SCS policy to include wildlife resources (and I include game, non-game and fish) as important considerations in planning and applying conservation practices. I was trained in this policy starting in 1949, and it is emphasized even more strongly today. I refer you to the recent multi-year plan of the SCS in Minnesota, "Mission to Quality."

(Mr. Oemichen used slides to describe this new plan.)

The plan states that it aims to effect:

1. Increased emphasis on fish and wildlife as one of the conservation

and production goals of resource management systems.

2. Ways to help landowners understand and appreciate the economic and aesthetic values of fish and wildlife.
3. Accelerated use of wildlife habitat development, preservation and management practices in conservation farming, with special attention to endangered species.

These objectives and our policy to conserve and improve fish and wildlife resources are not just lip service. We are positively serious in our efforts to enhance fish and wildlife and to avoid projects and practices which have adverse effects on these resources. Our efforts in this regard center on conservation and management of the basic ingredients of fish and wildlife habitat--soil, water and vegetation.

Specific annual goals listed in "Mission to Quality" include 25,000 acres of wildlife upland habitat management, 15,000 acres annually of wetland habitat management, and about 1,700 ponds. These are only three of many practices which affect wildlife and which SCS assists landowners to plan and apply. The "Mission to Quality" also outlines some other important goals for erosion and sediment reduction, pollution prevention, land use planning and zoning, flood reduction and water management. This five-year plan is the outgrowth of the SCS Framework Plan for the United States.

"Fine," you might say, "but you're talking to people who have seen a lot of plans strangle the files and end up recycled as toilet paper."

Well, we've got some reasons to believe we can meet these goals and I'd like to talk about some of them. At the same time I'll use a few slides.

RC&D

One of the programs administered by SCS is Resource Conservation and Development Projects. An RC&D Project is a multi-county area with similar resources where there is interest and leadership to conserve, develop, and utilize natural resources through community groups and coordinated agency cooperation. While the emphasis is on rural development--environmental as well as economic--a major thrust is to accelerate resource work over and above going programs and to find, develop, and implement new ways to solve resource problems. This means using politics through these local groups based on sound technical support to implement these new ideas.

It works for the simple reason that soundly conceived ideas can and should be supported and implemented, politically, technically and financially.

In the two RC&D Projects in Minnesota, WesMin and Onanegozie, close to 10,000 acres of wetlands have been created or improved through project action. There are many thousands of acres remaining to be done. One watershed itself has 200 potential sites with 10,000 acres.

Carp Control.

In the Alexandria, MN. area, the Department of Natural Resources, the SCS, the Bureau of Sport Fisheries and Wildlife, the County Board, the Soil and Water Conservation District, and the Viking Sportsman's Club are working together to carry out a \$2,000,000 carp control project. Installation of barriers and traps on a watershed basis will reduce migration between lakes and spawning areas and will enable wildlife and fishery managers to apply intensive measures to certain waters to reduce rough fish populations and to improve habitat for desirable fish and wildlife. Carp will be harvested and processed through a new corporation into human food.

Eagle Lake and Knife Lake.

A very determined effort has been made to implement pollution control on a watershed basis in the watersheds of lakes and streams. The example here is Eagle Lake in Kandiyohi County where a sewage system was installed around the lake and infiltration type structures in the watershed. These use wetland areas as nutrient traps.

Another improvement project is Knife Lake in Kanabec County--the planning for a new dam and recreation area includes flood plain zoning and a concentrated effort to control feedlot pollution and pollution from lakeshore developments.

We've been using a system that indicates phosphorus sources of pollution without going through a long drawn out process of water analysis. The system developed through the Agricultural Research Service and the Minnesota Department of Natural Resources identifies the source and extent through a process of field evaluation and supporting data.

Some environmentalists take these nutrient pollution control efforts for granted, but those on the firing line at the field level know that there is a lot of politics, money and persuasion between what's nice and getting it applied to the land.

In fact, one of the greatest deficiencies in government today, in my opinion, is the too-thin line of implementers at the field level.

P.L. 566

You're seen and cussed and discussed the Public Law 566 Small Watershed Protection Program--from a channel standpoint, at least, and you know this didn't fall on deaf ears. I can tell you there are a lot of considerations being given to improving watershed planning for wildlife in Minnesota.

Crooked Creek

Some recent construction includes Crooked Creek where two structures include some interesting fishing areas, and trout stream improvement, which has been done through the DNR. Tamarack River includes a 1.720 acre multi-purpose wildlife and flood prevention pool.

And I may jump in the frying pan here--Crane Creek Watershed. But the odds here, in my opinion, are that without P.L. 566 and constructed as a regular judicial ditch, wildlife could have taken a real beating. Needed channels were built here, and 837 acres of wildlife area were improved.

Water Bank

In 1972, 13,000 acres of wetlands and adjacent lands were placed under Water Bank contracts. This program sets up ten-year contracts with landowners to preserve wetlands. We're shooting for close to 20,000 acres more in 1974.

All of these areas will be included in a soil and water conservation plan for the entire farm. Erosion control is an important consideration in this program as all others.

In Minnesota, we are shooting for one to four acres of adjacent land for every acre of wetland. We are getting an average of two acres of adjacent land for each acre of wetland. Adjacent lands must be in permanent cover--primarily grasses and legumes, with some shrubs, so not only do water-oriented species of wildlife benefit but also upland species.

Conservation Operations.

Conservation operations program is our bread and butter assistance program to landowners. It consists largely of direct, personal planning and application assistance to individuals and groups. This is the program whereby we emphasize conservation planning (including wildlife) on individual farms and other land units.

Last year, nearly two million trees and shrubs were planted on the prairie area of Minnesota. This is a two acre average per farmstead windbreak on 1,100 farms, plus about 250 miles of field windbreaks.

About 1,600 ponds were constructed in 1973 and included about 300 wetland development sites and about 100 fish ponds.

231 feedlot pollution control measures were applied in 1973 with total statewide installations about 628. This practice is accelerated this year through the 1973 REAP program.

About 17,000 acres of wild rice paddies which provide good waterfowl

habitat have been built since 1967, most of which has been engineered by SCS.

There are a number of other practices that were installed in both urban and rural areas which are of direct or indirect benefit to wildlife. Preservation of existing habitat on privately owned lands receives the greatest emphasis through the conservation operations program.

Potpourri.

I doubt that I could mention a subject of more concern to conservationists than the increased emphasis on crop production which has come about in the last year and the apparent increase in land turned black over winter. The increased cropland estimate is 1.2 million acres in Minnesota, with most of this set-aside acres, but considerable acreages are also coming out of woodland and grassland.

And current increased crop production results in some other problems. There are terraces, contour strip cropping, and waterways taken off the land because farmers feel they do not fit modern farm methods, especially where the farmer has sold his livestock and now follows the corn, soybean, "Miami" rotation.

But I hold that the farmer is no different from anyone else in our society. He likes the good life and will take short cuts. The same can be said for a land developer who allows erosion in a new shopping center, because it costs more to control it, or a citizen who lets his septic tank run into a lake because it costs \$4,000 to put in a collection system.

Do we come to the conclusion that laws and rules are the answer? Yes, we do, but anyone who understands landowners knows laws and rules are not enough. We need new ideas, innovations, methods that solve the current and future land use problems--on the firing line.

Except in the case of a few wildlife species (wilderness types, for example), I believe it is possible to have intensive wildlife management and intensive agriculture on the same land. The limitation, if any, is the limitation in imagination of the landowner and the technical people assisting.

I'd like to throw a couple of ideas at you--they're no panacea but will give you an idea of what I mean.

A good part of Minnesota's cropland (23 million acres) does not have to be black all winter. It can be a shade of brown--light brown from corn and small grain residue. We estimate about half of these 23 million acres, or 12 to 13 million acres, are suitable for minimum or mulch tillage methods. About one million acres in Minnesota are already receiving this kind of treatment.

To keep corn stalks or straw on the land surface all winter reduces snow

blowing, provides food and some travel cover for wildlife, and at the same time controls wind and water erosion. Minimum tillage-type farming also reduces energy requirements.

Many of the midwest states are using this practice. As you go north, soil temperature can be a problem, as can the use of herbicides and fertilizers. But research should be able to overcome this. As conservationists, we ought to be pushing this research hard.

In the United States, about 60 percent of the land is privately owned. This is the area on which SCS concentrates most of its activity, and it is on this land that the potential for increasing wildlife is greatest.

How many landowners do you know that have potential areas which could be developed into or improved as wildlife areas, or land used for cropping, grazing, or forests that could also produce more wildlife? I know quite a few. Why doesn't the landowner go ahead and do something about it? Well, some have to go like hell to make ends meet with their time and money. Some are not interested in wildlife. On the other hand, there are many non-landowners very interested in the well being of wildlife.

If these non-landowners are willing to put their money and time where their mouths are when it comes to wildlife, why not get them and the landowner together?

That is the essence of an idea presently being explored between SCS and the Department of Natural Resources in Minnesota. It does not have to be complicated. SCS and Soil and Water Conservation Districts can locate the landowners; DNR can locate the outdoorsman. Getting these people together on the land should not only get some habitat work accomplished, but also increase communications between city and country folk.

I'd like to add a point here. I have four sons and a daughter. They all think the environmental movement is really neat. But they didn't find out how really neat it is until they got out and planted trees all day, pulled weeds out of the trees, piled brush for rabbit cover, shaped and seeded washouts in a grass waterway, and used a wheelbarrow to plug a wetland area. They can now discuss the environmental movement realistically.

RECP

The new RECP--Rural Environmental Conservation Program--has some excellent opportunities through long-term contracts and the Forestry Incentive Program. Opportunities to control erosion, improve wildlife areas, improve timber supplies and other conservation work should increase.

It behooves all conservationists to motivate and guide that program to get its money's worth in benefits for all people--not just the landowners.

For example, financial assistance for feedlot pollution control hangs

by a string due to the Office of Management and Budget declaring that farmers should provide their own pollution control. With the farm income increase looking like a one year shot, and farm costs already eating up profits, especially for cattle and hogs, farmers are not likely to look at pollution control as a high priority farm expenditure without financial assistance.

And there is another situation that occurs in RECP that is also applicable to other aspects of soil and water conservation. That is the need for federal, state, and local land use policies.

The situation was this at a recent RECP development meeting: several counties wanted a practice to clear forest land for pasture. The immediate question that hit me was where should it be used? What land should become pasture? What land should be forested? Do we need forests more than pasture or vice versa?

Well, even if the practice were a good practice, we could not consider it without knowing the area where it might be applied.

The time is overdue for people to make land use decisions based on federal, state and local policies.

Cooperation

While there are some fine examples of cooperation, there needs to be greater dialog and work exchange between game and fish managers and soil conservationists.

I've wondered about planning for wildlife on a township or other area basis. Some of this has been done. If a township in pheasant country, for instance, could be planned with farmer, SCS, and game manager input including the plantings, the wetland development, etc., the District Conservationist in working with the farmer could incorporate these ideas into individual farm plans that the conservationist would work out with the farmer.

This would be of material help to the District Conservationist who does not have a strong wildlife background.

I hope that through this discussion of SCS goals, policies, and some of the things we are doing and thinking about, that you know us a little better. I hope I have conveyed to you that we hold wildlife as an integral part of soil and water conservation.

In closing, I know there are going to be differences between wildlife and landowner interest, and the professionals involved.

But the more we put our thoughts together sincerely and constructively,

the better off wildlife and all the other interests in soil and water conservation are going to be.

To paraphrase Will Rogers, I've never met a game or fish manager I didn't like, even after we had a hell of an argument.

PRES. HERBST: Very good job, Bill. Are there any questions or comments?

HARMON, NORTH DAKOTA: This may be more in the way of an observation, but recently I've spent a considerable amount of time trying to understand the SCS reporting system and primarily the amount of land treatment that is on the land as of June 30 of each year. Presently, wildlife benefits are being claimed in terms of stripcropping and range management. Specifically, wildlife upland cover is somewhere in the neighborhood of 30 million acres. Also, in the recent Soil Conservation Service Highlights which outlined the amount of land treatment going in to fiscal year 1972, the statement was made that there are millions of acres of land to stripcrop and range management that have had substantial benefits to wildlife. Frankly, I'm confused here. The criterion, as I understand it, for stripcropping, is that it maintains soil fertility. The Missouri Study shows that fertile soils produce more and bigger and better wildlife populations than unfertile soils. It seems to me that before we're ever going to get on common ground here, we've got to zero in on this thing a little tighter. For example, in eight midwest states here from 1936 to 1970, there's been something in the neighborhood of 40 million acres of stripcropping, yet pheasant population is only ten percent of what it was during that same period of time. We're ignoring the fact that there are vegetative types on those strips that may be detrimental to wildlife. It seems to me that these things have to be singled out.

Also, in terms of range improvement which the Conservation Highlights said had substantial benefits to big game, when you start looking at the actual practices, again from 1936 to 1970, it shows in effect 55 million acres of land where competitive shrubs have been controlled, and about another 40 million acres where the seeding of range lands has gone in, which is actually adverse to big game population where you're trying to maintain a diversity of vegetative types. What I'm asking is, how can we split this stuff up and find out where the benefits really exist?

Omeichen: Well, I couldn't agree with you more. I try to pull out information that I would like to use, out of that system, and I have a difficult time myself, and I suspect I understand it a lot better than you do. We've talked about it considerably in Minnesota, in fact we prevailed upon the State Conservationist, and he went to the last meeting of state conservationists and recommended that we overhaul the record reporting system completely. I suspect that what will happen is that we'll move through rather than reporting individual practices, we'll report resource management systems and acreages. Acreages that have been completely treated for whatever aspect we're thinking about--wildlife, erosion, etc.

PRES. HERBST: Yes?

FRANK, WISCONSIN: It seems to me that one of the judgements of priority on programs such as wildlife or stripcropping or terracing is the total of dollars spent. By that criterion, actual wildlife practices in most states come up very short--something on the order of one to three percent of the total budget, particularly under RECP. The question I have is, how serious are state committees and the Soil Conservation organization about wildlife management in light of the small dollar expenditures that actually go into it?

OEMICHEN: I can't, of course, speak for Wisconsin, because my work is limited to Minnesota. But I can tell you this: in Minnesota, we work damn hard, especially in RC&D, to broaden the program to include many ramifications of wildlife management. For instance, take the carp control project. Here we're using RC&D funds to build carp traps and barriers. That seems to me to be a far departure from anything we've known in the past. Also, of course, the basic law, P.L. 91-343, was introduced by Rep. John Zwach, prevailed upon by the project committee in the WesMin RC&D project; of course, when it got to Washington, you know Rep. Poague carries a lot more weight than Rep. Zwach, so he ended up introducing the bill, or sponsoring the final version. But originally, the bill came from Minnesota.

Now, to answer your question, it seems to me that any organization is based on people. It's what those people are thinking about that comes out in the final analysis. In Minnesota, through the biologists and through the state staff, we've been putting a lot of pressure in any direction that we could. For instance, we tried to get farmstead windbreaks back in the program by going through all kinds of contortions. But we tried a lot of other things. And all I can say is, that it's going to depend on the people in administrative positions putting pressure on the field to take an orientation towards wildlife. I think it's coming.

BERNER, MINNESOTA: In your RECP, the wildlife practices in particular are very poor in cost-sharing in comparison to, say, forestry projects or erosion projects. One other aspect of this is the necessity of tying a wildlife program into an erosion benefit, in other words, controlling some point of erosion in order to add a food plot which is supposed to last five years. Some of these prerequisites applied to the wildlife project are rather ridiculous. I was wondering, in this recent meeting that you had, have you made any changes along this line?

OEMICHEN: Yes. First of all, of course, on wetlands under the practice any provision for erosion control was removed. We also recommended to the state committee that we remove all erosion control requirements on wildlife.

About cost sharing. I've been down in the state office now for three years, and the very first year I was down there I recommended to the committee that for wildlife practices there should be cost-sharing with the

farmer on a 100 percent basis. For the simple reason that he's providing the land, and land's expensive. That ought to be his input. I think, Maynard, you were there that day when we recommended that as forcefully as we could. But you sit here at the state level and make this recommendation, and then it's got to go up to Washington and be approved there. Something happens in between. But I know that it behooves all of us to get a hell of a lot more militant about some of these programs.

PRES. HERBST: Any further questions?

HARMON, NORTH DAKOTA: I'd like to make a point of information. Title X of the 1973 Farm Bill provides authority for the SCS or the Department of Agriculture to secure perpetual easements on flood plains, aquatic areas and shoreline. Do you foresee any possibility of this being implemented by USDA as some alternative to channelization?

OEMICHEN: Well, you know how much of the 1973 Act's been brought on so far. I just couldn't answer that question now. I would hope so.

PRES. HERBST: Any further comments or questions? One more.

THREINEN, WISCONSIN: There's a question I'd like to raise. The SCS concentrates on individual farm units in its planning, and what we get, basically, is more corn land and more mono-types, which of course are inimical to wildlife, and we get more silty water and more over-fertilized water. Does the SCS or can the SCS and would the SCS think more in terms of planning in larger units than just a single farm?

OEMICHEN: Yes, we've done considerable planning on a group basis. But to get back to the first part of your question: Just because we grow corn does not mean we have to have erosion. In fact, we can have just as good erosion control programs while growing continuous corn as we can under a good terrace or stripcropping system, with the right management systems. In fact, if you go down to Rock County, Minnesota, or even northwest Iowa or Nebraska, you'll see some till-planting where the corn stalks are left on the land all winter. They go through one operation and plant the corn in the spring of the year, leaving that cover out there all winter for wildlife. You'll see very, very good erosion control. Soil loss is down to one or two tons per acre, whereas, possibly with stripcropping or some other system, you might be up around three or four tons per acre.

But group planning has been done on waterways and some other practices. There should be more of it. This is what I was getting at in recommending that we plan for wildlife on a township basis, if possible, or some other kind of basis to get it beyond the individual farm. In the final analysis, of course, you're going to have to go back to that farm unit to get it on the land. I agree with you on that point. I think, as far as wildlife is concerned, we're going to have to have more input from game and fish managers in the work of the Soil Conservation District and the SCS to bring this about.

PRES. HERBST: Any further comments or questions? OK. At this time we'll recess for coffee for 15 minutes or so.

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Reconvened Tuesday p.m. Session

PRES. HERBST: I call this meeting to order. A number of the people who have made presentations have commented on the importance of information and education and particularly the news media, and I think we're very fortunate that there have been a number of people from the area papers, as well as from the Twin Cities, television, and radio, here. We do have four that are still around, and I would like to introduce them. Ron Schara, Minneapolis Tribune; Jim Blugaugh from the Duluth News-Tribune; Hank Kehborn from the St. Paul Dispatch-Pioneer Press; and Bob Junker from WDMI here in Duluth. There's been some from KDAL and other stations as well.

At this time, we're very fortunate to have with us a person who understands the timber wolf as well as and perhaps better than anyone I know. He's been of considerable assistance to our department in an issue that's been highly controversial in Minnesota. Of course, our Canadian friends have commented on the anti- and the lovers in Canada. I'd like to, at this time, introduce Dr. David Mech.

TIMBER WOLF STUDIES IN THE SUPERIOR NATIONAL FOREST

by

Dr. L. David Mech, Wildlife Research Biologist
U.S. Fish and Wildlife Service

Thank you, Bob. We've got a series of slides that will be the whole program, really, but I did want to share with you one little story from a conference I attended a couple of weeks ago in Washington. There were a number of little old ladies there in tennis shoes, that type, you know, and some professional trappers and predator controllers. The subject under discussion at this particular time was the wolves killing sheep. One little old lady raised her hand and asked why, when these wolves are trapped, they have to be killed, why can't they just be castrated. And a grizzled old trapper raised his hand and said, "Ma'am," he said, "those wolves are killing sheep, not raping them."

Can we have the lights and we'll proceed with the slides.

I thought you might be interested in this slide. It's a pair of wolves sitting on a ridge and looking down on a cabin and speculating about the inhabitants of the cabin. They're saying, "I understand that they kill for fun, tend to overrun an area, slay cattle and sheep, gather in packs and howl until dawn, and sometimes mate for life." I think some of us have said that about wolves, too.

This is the animal we're talking about, the Eastern Timber Wolf (*Canis lupus Linnaeus*). It's not the brush wolf or coyote, and this is important to distinguish because many people here speak of us having thousands of wolves. What they mean is thousands of brush wolves or coyotes. The actual number of timber wolves here is probably somewhere between 500 and 1,000.

The original range of the wolf--this is all the subspecies in the 48 states--was pretty much as pictured here, and now the range is restricted to upper Minnesota, Isle Royale, and Lake Superior. There should be a few dots scattered in the Upper Peninsula of Michigan, and a question mark over the Rocky Mountains where there still may be a few members of the subspecies, the Rocky Mountain Wolf. This represents approximately less than one percent of the total range of the wolf originally in the 48 states. It's therefore been declared an Endangered Species and is on the Secretary of the Interior's list, as you're all aware.

In Minnesota we'll take a closer look here. The range of the wolf is divided into two zones. The upper one, north of the black line, is 12,000 square miles that is primarily wilderness, and there's a second zone called the peripheral range, about 12,000 square miles, to the south. In the peripheral range, there's not much real wilderness; in fact, there's not many places you can go to where you can get more than five miles from a road. But in the primary range there are large tracts of wilderness, such as parts of the Superior National Forest, some of the Pine Island country, and even in the northwest the Beltrami Island area. (All in Minnesota.)

The red lines depict the study areas that we have. North and east of the red line up in the Superior (Forest) is our major study area. We've been looking at wolves there for about eight years. Then, in the northwest, we have a graduate student who, in cooperation with the Minnesota DNR, is studying the wolf population there. Then we're cooperating with the DNR in a wolf study in the DNR's coyote study range; when the coyote biologist catches a wolf, he puts one of our radio collars on it, and then follows it along with the coyotes. There should be some interesting data on the coyote/wolf interaction. This also happens to be the farthest south breeding pack that we know of, southeast of Grand Rapids. So we have a perspective on the wolf in three parts of the state. Most of the data I'll speak about today comes from the northeast corner.

In Minnesota, the wolf preys on moose, on beavers, but primarily on the white-tailed deer. Our main method of studying the wolf is to live-trap him and put a radio transmitter collar, molded in a hard acrylic, around his neck. Each collar is tuned to a different frequency. We have a special set of receivers to pick up the signals and to distinguish individual signals from the collars.

The wolves are caught in modified steel traps to minimize any possible injury to the animal. When you approach a wolf in a trap, this is pretty much the way he looks. He sits there wishing he didn't get caught. Then, as you approach him, he will get up and try to run away from you. We then

use a stick with a syringe on the end and stick the wolf in the rump muscles with a drug. Within ten minutes, the animal is out for an hour or two and we can process him. This is only a pup, about 30 pounds, but one man using this technique can handle a wolf of any size.

One of the first things we do when the animal is anesthetized is to take blood samples. I'll tell you more about that later, but these samples are analyzed by Dr. Ulysses Seal from the Veterans' Administration Hospital. A total of 21 parameters are run on each blood sample. He looks at various nutritional parameters, cholesterol, glucose, blood urea, nitrogen, calcium, magnesium, iron, then red blood cell count, white blood cell count, and more. This is one of the few studies where we have a picture of the wolf on the inside as well as an idea of the habits of the animal after he's running around loose again with the collar. So we can correlate hormonal concentrations of testosterone, cortisone, thyroxin in the level of that wolf with what he is actually doing on the ground. This is one of the few studies in the world that's been able to do that.

Then we weigh the wolf. Adults generally weigh between 60 and 100 pounds; females are generally lighter than the males. We put the collar around his neck. It's bolted shut around the neck, and then a piece of acrylic mixture is placed on the hinge and the joint of the collar, while it's on the wolf, to make it a hard, solid piece that will remain on the wolf for several years, anyway. The collars weigh about a pound. They have a theoretical life of more than two years. Our record has been 27½ months on one wolf with one collar. We also try to recapture wolves and replace collars. We have caught one three times now, and she's still going. Some of these are our prize animals.

Now, the next time we see this animal, or have any contact with it, will probably be from the air. We knew when we started this that wolves are great travelers, and that the only way to really keep up with them would be from the air. So we have an aircraft with a directional antenna attached to each wing strut, and the signal comes in strongest to the end of the wing. I'll explain that in a minute.

This gives you some idea of the range of the transmitter. If the animal has really taken off, and we really need to find him, we can go up to four or five thousand feet and we've got a range of 50 or 60 miles. Normally, we fly about 2,000 feet, and we get 10 to 20 miles range. A lot depends on the terrain and the weather and everything else.

Now, as I mentioned, the strongest signal comes in from the end of the wing, here. If we don't know where a wolf is to begin with, if we've lost him, if we haven't followed him for a week or two, we go up in the air and make a circle. We listen for a signal from one wing. When we find that, we then confirm that it's coming in only from this direction and not from the 180 degree direction, and we do that by just circling. Then we'll come back in this direction and begin homing more accurately. We'll find that if we're not heading right straight towards the wolf, we'll get a stronger

signal on one wing than on the other. We therefore turn the plane in the direction so that we get an even signal from both sides, and that puts us right on the beam to the wolf. Generally, with wolves scattered 10, 15 or 20 miles apart, we can locate one wolf every 15 minutes this way. It's pretty much a matter of getting the signal, orienting the plane to it, then just flying right on a straight line until you're over it.

The next thing to do is to look around and see if you can't see him down there. Now, in summer that's difficult; in winter, we're aided by a snowy background and by the track. We'll count them on a day to day basis. Incidentally, our general schedule is to fly twice a week throughout the year, supplementing this with ground tracking the packs that are accessible from the ground on a daily basis. Then, during winter, we have several periods each month--December, January, February and March--where we fly every day for a two-week period. This gives us different kinds of data, but at a minimum we get a count on the number of wolves in the pack and an idea of what they're doing. It doesn't really both the wolves, after we've followed them for a couple of weeks. They get quite accustomed to the aircraft. Here's one, for instance, lying on his back with his forefeet in the air, and his head is going round and round in circles, watching the plane.

Now, here's a little playing going on. We keep notes on all this activity. When the wolf makes a kill, we can find out just how many animals were there, how long they spent at the kill, and then how long it took them to make another kill, and just go on and on with this, so that we come up with an average kill rate for each pack for the winter.

Now you're looking straight down at a pair of wolves that are feeding on a moose.

Another benefit of this technique is that if we get a signal from an area and we don't see any tracks in it, day after day, and we don't see the wolf, we might suspect that he's dead. So we go in on the ground with a directional antenna hand-held and here we found a wolf with his collar still going, but the wolf is dead. We haul him out of the woods, take him to the University of Minnesota, and give him a thorough post-mortem examination so we can find out just what he died from.

In the summer, we have a much more difficult time seeing the wolf. In order to do this we've learned a few tricks. One of these is to get up at the crack of dawn when wolves are still traveling. In the summer it's so hot that generally they travel by night. But at six, seven o'clock in the morning they are still traveling.

When we come to a signal that seems to be moving, if it's near a lake, stream, pond, river or road, we'll stay with that animal and see if we can spot him when he crosses. Here's a pack of four crossing one of the bays in Basswood Lake. The point is, though, that then we can see them. Not only do we have one of our radio wolves there, but he's got three with him. About 10 percent of the time that we home in on the wolves in the summer we

actually see them; about 75 percent in the winter.

Here's another example of the kind of observation we get in the winter. I don't know how well you can see this. This is an old road in the country that the wolf crew is going into tomorrow. Here's the old lady wolf and a couple of pups. Here's some of the other animals in the pack. It turns out there's 12 in there altogether. Now, we'll take another look here. I think you can see a little better. As we went around and around, we counted a dozen altogether, including six pups. But, because we had a difficult time doing this--and it's rare to see so many wolves at a time from the plane--we have other methods of trying to gather the data.

We've gone to automation. We have an antenna set up about a quarter of a mile from a den, and the signal comes into the antenna and down into this setup where there's a recorder, a battery and a receiver. The signal comes in and it tells when one of the radio wolves comes within receiving range of the antenna. The setup prints it on this sheet, with what time the animal was in that general vicinity. Along with this, we have a student studying howling, and he has placed a bug right with this system with a microphone which transmits any howling around the den, transmits it 15 miles back to our lab where it's recorded continually. He's listened to dens and wolf rendezvous sites for 1,000 hours, and he's now analyzing that data at Stony Brook. So with this, we know which of the radio wolves was at the den when the howling occurred. It's a pretty neat piece of data.

We get a couple of types of printout. When we only have one radio wolf in a pack, we use this kind of recording which is more sensitive. You get the base line here, and when the animal starts arriving at his den, you get this kind of thing--it's pretty clear cut. When we have a couple of wolves or more radioed in the pack, then we use a scanner which listens to one frequency for five minutes--that's what this series of lines is--and then it switches to another, and another. When you get a series of zigzags like this, one of the radio wolves on that frequency was there. So we know that these two wolves came to the den at this period and were absent before that. So in this way we can get more information than we could if we just relied on visual observation.

Sometimes we know through the radio where the dens are and the rendezvous sites, and this allows us to go to them at night, when it's calm. We'll howl at the wolves and often get replies. One night our student who's studying howling got 51 replies and recorded them all. He's got thousands now which he's analyzing. In the process, sometimes a wolf will come up to us. This is a 30-pound pup that is wondering what in the world we're doing. We probably--I don't know what we were saying when we were howling to him--but whatever it was, he figured he ought to get a closer look. He came up to within ten feet. But we don't often see them. At night we can hear them walking between us when we're howling, but we can't see them then.

Every time we home in on a wolf, we get a point on that. I'll give you some examples on that. This is a pack of five wolves which lives in about 50 square miles up the road here about 50 miles, and it's pretty typical of

one pack of wolves. We find their territories ranging from 50 to 125 square miles in the Superior National Forest. This will tell you a little bit about the stability of a pack's territory. This is the same pack but with varying sizes--five, nine, two, after this it went up to four, the following winter it was back down to three, then down to now to two. Each time, the pack used the same general area. Each symbol represents a different year for the same pack.

Basically, you can see that they lived in the same general area. There's a good reason for that; there really isn't any other place to go. If you look at all the packs that we've had radioed over a period of years, and superimpose the data, it looks like this. Each symbol represents a different pack. So there's one pack right here; this is a second pack; a third. What this indicates, on the basis of these 12 packs, is that there is very little overlapping of the groups. They seem to be territorial, in other words.

The reason one pack can't move out of a certain territory is that there's no place to go. If they move this way, they're trespassing; the other way, they're trespassing. These light spots, incidentally, mean that there are packs here but we don't have them radioed. (It's extremely difficult to catch some of these wolves. There are certain packs that we've been trying for that we haven't got or that are extremely inaccessible, like the one up in here. There's a pack there that we just don't have data on.) But our data indicates there's a pretty strong territoriality involved, or at least mutually exclusive use of the areas.

We envision the wolf population--the spacing of the packs in the population--as looking like this, basically: every available territory is occupied. We can take a closer look at this from another perspective. This is the olfactory perspective of a wolf pack territory. Now, just try to picture this as being one territory of a wolf, here, being bordered by other wolf pack territories. This is hypothetical but it's based on real data.

We have a student studying scent marking in wolves. This is the first study, quantitative study, of scent marking in mammals anywhere. What he has found is that about every quarter of a mile, on the average, during the months of November through April when he could follow the wolves on the ground, they made a scent post. Now, I'm not talking about just a scats or a place where a wolf has urinated; this is a deliberate type of thing. Like a dog raises his leg, scratches a little bit, and urinates a few drops in a bush or something. What I've done here is make a model of the distribution of these things. The lines that you see represent trails, but they're not actual trails, they're hypothetical trails, but the whole scale is right.

This is what the wolf pack territory looks like from the olfactory standpoint to the wolves in it. About every three minutes on the average, a wolf is smelling at a scent post, when he's traveling, or making one. If he's in his own territory, he's smelling his own and responding to it. If he's on the edge, he's responding at a higher rate than he would from smelling his own urine--he's smelling the scent post of a neighboring pack.

So, as far as we can see, there's an olfactory border--there may be some overlap--but generally there's an olfactory border of about a half mile along the territory edge of each of these packs. This explains how each wolf, and even the pups who are just starting to travel around, know that they're in their own territory and not in somebody else's. It also explains some things about lone wolves that we'll mention a little later. But bear in mind that this is a conservative view--this does not include scats which we consider to have an olfactory and scent-marking function, nor does it include the urination of the pups and the females. This is only the stuff that we know is strictly scent-marking. You can also probably envision each area between trails as being covered with a smaller network of trails, along which are the scent marks. So there are even more scent marks than this.

With the territoriality and the dominance hierarchy, which I won't go into--but you all know there's a top member in the pack and there's a regular social ladder--these are some of the factors that tend to help regulate population. For instance, with the territoriality, this reserves a space for each breeding pack; with the dominance hierarchy, only the top female, generally, will breed. When the territoriality has carved out an area of 50 to 100 square miles for one breeding female, this is one of the factors that tends to keep wolf numbers down.

There are other factors, however, and some of them haven't been turned up before. Let's look at the percentage of males that seem to be born into the population. Certainly this represents, at a minimum, the percentage of male pups that exist in the fall of the year. We've got evidence to believe that this is pretty representative of the number actually born in the population. We'll look at three areas, the northwest, the graduate student's area near Red Lake, first. In that area, there's a moderate amount of exploitation of wolves--they're being killed off fairly rapidly. About 50 percent of the pups there are male. In the east central study area, where there's a heavy exploitation of wolves, only about 11 percent of the pups are male. In the Superior National Forest, generally the pups are about 66 percent male. So there's some real discrepancies here. Some of the sample sizes are small, but these are all statistically significant. In 1973--we'll go into that later--but you can see we have even a higher preponderance of males. When you get a species that is monogamous like the wolf, at least for individual breeding periods, any discrepancy from the 50/50 sex ratio is a factor that tends to reduce the total biotic potential of the population.

Dispersal is another factor that tends to regulate the population. We've found that lone wolves--that is, members who disperse from the pack--have five to ten times the chance of being killed, probably, as do members of a pack. So once these animals disperse, their life expectancy decreases markedly, and we can consider them temporary members of the population. When a wolf disperses, he becomes a lone wolf, and he moves around a very large area--a thousand square miles is not unusual at all.

Here's an example of one animal. On March 7 he was here, on March 14 he was down here, 50 miles away, on March 21, another 50 mile move within a week. As I say, this is not unusual for a lone wolf. They move all over

the area. If you superimpose all the points, all the locations for lone wolves without identifying individuals, you just look at the distribution of lone wolf locations, you see big blanks in the area. We wondered what those corresponded to. Now that we have more data, we know what they correspond to. We're going to superimpose the lone wolf locations on the pack territory, and you'll see what we get. You'll find that the blanks are represented by packs.

What's happening is that the lone wolves are avoiding packs; they're moving along the edges of them, between the packs, very probably being clued in by that line of scent marks from each pack that you find on the edge of their territory. These are the areas where the loners tend to stay. And that's the area where there's the least chance of getting caught and killed by a pack, because that's probably what would happen if they do run into one of the resident packs. So envision these lone wolves as shifting all about the territories of all the packs, trying to stay away from the individuals in those territories, and still move around and earn a living. Obviously, they can't do as well as they could have if they'd stayed in the pack. We don't know why they leave; we're working on that now. But we do know that they do leave.

We'll take a little closer look at the lone wolf. Some of them, come breeding time, give no indication that they have any interest in breeding at all. You can follow a lone wolf right through the breeding season, whether it be male or female, and it just doesn't seem to attract a member of the opposite sex. Others do attract a member of the opposite sex, get together for a couple of days, and then break apart. This isn't supposed to happen if they're going to mate, since they stay together for at least the next year or two while they're raising the pups. When they break apart, you know that something went wrong--you don't know just what, whether there wasn't a complete heat, or what happened, but we do have these cases where they'll just get together for a few days.

Then we have another point in this progression. Some of them--one pair--actually settled down. There was an area in here that looked like it wasn't often that the member packs used it--it was only a couple of miles wide. Now we'll take a closer look at this empty area and see that a pair of lone wolves tried to wedge themselves into this. In doing so, they were trespassing on probably five packs, and they had a very small area to begin with, only 18 square miles, and I just bet they couldn't bring up a litter of pups there.

It turned out that they did have pups, and the pups got to be at least five or six weeks old, and there were at least two--there may have been more. I just couldn't understand it. So we watched them very closely and one day the signal from the adult female who we had radioed kept coming from the den day after day, which isn't too unusual, but after a while you begin to wonder. We didn't want to disturb the area by going in there to check, so when it finally became obvious that she wasn't moving at all, we did go in there, and this is what we found. We don't know what happened to her, but

we do know that obviously she didn't live, and probably the pups died. We tried tracking the area; we combed it and trapped it heavily the following fall, but turned up no pups. We think they starved. But all we know is that she didn't make it.

So here's some sort of a progression with lone wolves: some of them not breeding at all; some of them showing some signs of breeding, getting together for a few days; others get together for a couple of weeks and then break up; and then these actually did pair, tried to squeeze in, and just never did pull off raising the young.

Here's the first lone wolf we ever radioed. He came down to this area, moved back and forth, then over a period of a couple of months moved down west of Duluth here, then over towards Grand Rapids, then we lost him after the two-month period. This is 129 miles, straight line distance, and we estimated a travel route of about 500.

Then here's one that lived in a pack of 12 a year ago last spring around the east side of Vermilion Lake, and then in March he suddenly took off and went towards Canada. He moved around, came back down through here, came close to the pack--may have actually gone in it, but all we know for sure is that he was here--and then headed off across north of International Falls. At this time, it became inefficient for us to follow him from our study area, and I had the guys from the northwest study area follow him. They picked him up here, he went to Lake of the Woods, tried to get around the south end of it, ran into the agricultural end there, then headed back on up the northeast side of the Lake. Then we had problems with the radio and lost him. But there's another dispersal of 130 miles.

They don't all go in that direction, but some of them do. That is, some of them move out into this peripheral area. Bear in mind, again, the primary range is here, and the peripheral range is here. This means that the primary range is producing dispersals, some of which come into the peripheral range. When they get there, it's a different story as far as breeding goes. When they get into the peripheral range, they will get together with a member of the opposite sex, mate, and have their own pack, which then has a colonizing effect in the peripheral range.

Up until recently, since the wolf was totally unprotected in the state, what usually happened was that before the pack was able to develop too far, one or two of them got nailed, and it began to dwindle. As one pack was wiped out, other dispersals would come down to take its place; it was a continual process, with wolves being killed and others taking their places and trying to colonize.

In the major wolf range there's sort of an area of accessibility, in the center of it, of about 600 square miles from Ely to Babbitt, over to Wahlsten and Tower. In that area, in one year, six of our radioed loners--none of which was caught there--ended up in that 600 square mile area and were killed there. It seemed to be a vacuum where there was a lot of hunt-

ing and trapping going on; there was a blank spot for the wolves there. The loners found that spot, started living there, got killed; other loners came in and it was a continual process, almost like a suction pump.

All these factors that I've talked about--territoriality, the dominance hierarchy, distorted sex ratios, and everything else--has added up to what I consider to be a social control on the wolf population. This applied up until about two years ago when things changed. There seemed to be a social control on the population until that time. There seemed to be plenty of deer for the wolves, the wolves weren't in bad shape at all, and yet their numbers were stable and were not increasing. This has been found in Isle Royale, too, with an average of one wolf for ten square miles living on Isle Royale for the last 15 years. In Algonquin Park, it averaged out about one wolf per ten square miles. That's just what the average turned out to be in the Superior National Forest too. When I was on Isle Royale, I wondered just what were the mechanisms keeping the population stable there, and now I think we've advanced in that area quite a bit.

We've been able to postulate a situation like this. If you take a territory of a wolf, find out how many square miles in it, how many wolves in it, for each year you get a density of wolves in that territory. If you plot the density of a wolf pack one year, plot that on the vertical axis, call that the original density; then the density of the same pack the following year, plot that on the horizontal axis, and you get a point here. The closer the points fall to this diagonal line, the closer they are to stability from year to year. This line represents absolute stability.

You can see that many packs are close to this line, which means they're fairly stable, but we do have some that vary. For instance, that one had 20 wolves for 100 square miles originally, and the following year it was down to four wolves for 100 square miles. That was quite an unstable one. You find that anything on this side of the line represents a decrease from year to year in density, and anything on this side represents an increase. You don't get any decreases with pack densities that begin with less than eight wolves per 100 square miles. And you don't get any increases for densities that start at 10 wolves per 100 square miles or less. So there's this area between eight and 10 wolves per 100 square miles that tends to be the stable zone. I think this explains why the population is stable. Some packs tend to fluctuate, but they always come back toward this line of stability.

Now, that was what happened until a couple of years ago. As I mentioned, wolves are dependent primarily on deer or have been for a long time in the Superior National Forest. The winter of 1968-69 was the hardest winter on record, and there was a tremendous die-off of deer, and there was a tremendous kill-off of deer by wolves. The population began to decline. I can't go into details on that, but let me just give you a rough approximation of what our data looked like.

The decline was most dramatic in the interior zone of the Superior National Forest. That's this area in here. This is the plot of wolf kills

from the period of 1966 through the next three years. You'll notice we had a number of deer being killed in this part of the interior zone. Now in the following two years, this is what the kills looked like. There were very, very few in this area, and in fact, there were almost no deer there; that's why there were no kills. If you look at this on a year to year basis, in the first year after the other map, there were still a few kills going on up here. In the second year there were a few, and then after that there were almost no kills in this area. In other words, this is an area of almost one thousand square miles where there were almost no deer during winter and just a few in summer.

The wolves had to respond to that. This is a composite of the 25 packs on which there is territory information available. The interior zone is about like this, in here. Now, what happened is that some of these wolf packs began migrating--this pack, for instance, migrated to the shore where there's a big deer yard with many thousands of deer in the winter. This pack migrated here. The adjacent pack migrated to another deer yard in the Ely area. In doing so, of course, they interfered with the resident pack and we don't know what happened there, but there were some pack break-ups going on. Anyway, migration is one thing that happens when the deer population declines.

Another thing is called trespassing. One pack of wolves that lived here, for instance, suddenly moved into this pack's territory. I followed them in the next few days. They killed a deer over here, ate it, and in a few days zoomed right back to their own territory. This was 18 miles out. The next year, they made two trespasses that we found out about--now, they probably did more than that, but these are the ones we found. Last year, the whole thing broke down. Not only did this pack trespass, but all the packs we had under study--last year we had six--all of them trespassed, and it began to get really serious.

About two or three years ago we had two adjacent packs, both radioed, one of which we watched come into the other's territory, here, and then one day they moved back into their own territory. The next day this pack was in here and we watched them attack the members of the resident pack. Wolves were going in every direction. We suddenly saw three wolves standing over another one; there was blood showing on the snow and we knew something serious was going on. Finally, these wolves went back to their own territory. We went down on the ground and looked. It was almost dark, so the next day we went back in there and a blizzard obliterated all the tracks. We don't know whether the wolves were killed, but the attack did go on. So some of the wolves that trespass, or some of the wolves that are trespassing, will make attacks, and serious things happen.

This winter we turned up two that were killed during trespass. This is a leader wolf of one pack that's 15 miles out of its territory who was killed by another pack. We had a second instance of that too. The more of this trespassing and migrating that you get, the greater the chances that attacks are going on. And if the right wolf is killed--or the wrong one--of course, like a female with pups or like this one, which just mated a few weeks be-

fore, so presumably his mate would have a much harder time raising the pups--and this might destroy the whole pack.

These are some of the breakdowns that we're finding as the deer population declines and the wolf population comes under controls--some social controls, but some social-nutritional controls. They were trespassing, breaking their social rules, because of strong competition for food.

We've got some other indications that there's a breakdown going on, but the data are not so clear cut. One is mating at odd times. In the past several years, we've watched wolves mate six times up until last winter. Each of those six times it occurred between February 19 and February 24. Now this year, we saw it twice. One was at the end of January; the other was in early March. I'm not certain that this is the result of the breakdown that we're seeing, but I have a hunch it is.

We're also getting a decline in litter size. Normally, at saturated population, we'd have a litter size of about five wolves per litter, on the average; in an unsaturated population, about six and a half. In our population it's way down now. Some of the packs are bearing two young. This year, one of our 'star' packs--though it mated--it either didn't have any young or the young were born dead or something, but it never did settle down to a den. We've got three year's history on that pack.

These things are going on, I think, as a response to the decline in the deer population. Bear in mind what we mentioned before about the percent of male pups. In 1973, the percent of males was up to 82 in the Superior National Forest. Now in the past several years, it's been 66, higher than any other part of the state, but this past year it went all the way up to 82.

Then if we look at some of the blood data, we find confirming factors. If you look at the percentage of pups that had only one deviant blood parameter--let's say had a real high white blood cell count--as an example. In 1970, only seven percent of the pups had even one deviant parameter, but 29 percent had one the next year, 91 percent in 1972, and 89 percent in 1973. These are the survivors, too. In other words, 90 percent of them in the last couple of years have had at least one thing wrong with their blood. Then if you take the total number of possible things that could go wrong with blood, multiply it by the number of pups that you're examining, then take a percentage of that, only one percent of the total possible blood parameters were deviant in 1970, 3 percent in 1971, up to 12 percent and 10 percent in 1972 and 1973.

The percentage underweight also confirms it. In 1970 we took all the pups and plotted how much they should weigh and how much they did weigh, and on the average they were only 10 percent underweight, which isn't bad. In 1971, they were 11 percent underweight. In 1972, this went up to 28 percent; in 1973, up to 40 percent. These are the survivors, again. These are the ones who have survived until fall, when we catch them. And many of these didn't survive the winter--there was a high pup mortality all through the

summer and winter.

We're even getting premature dispersal. This year for the first time we had a nine-month-old pup disperse out of a pack. And we had a one-year-old pup disperse out of the pack. Normally, they wait until they're two years or older before they disperse. We think this is probably somehow related to the other breakdowns we've seen. So we've got a lot of independent confirmation of the fact that something's going wrong in that population.

Well, one last adjustment that the wolf population is making now. A much higher percentage of them are preying on moose. This year, we found more moose killed by wolves than we found for all the other previous five years put together. They've switched quite a bit. They're still killing some deer where they can, but there's a big switch to moose.

Normally, I've ended this talk--quite a few of you have seen my presentation before--with the wolf at the door, because it was fairly typical of our financial status on the project. We're always going to someone else for support--we've approached the New York Zoological Society and we get some money from them, then we find that we're getting good data but running out of money so we go to the Minnesota DNR, then the Bureau. Anyway, the Rural Wildlife Fund, the U.S. Forest Service, and all these other groups have funded the project and kept it going. Finally, now the U.S. Fish and Wildlife Service is funding the project on a year-to-year basis, so we don't have to go out to raise funds. So this is no longer an appropriate slide.

So I thought that, in keeping with the times, I'd conclude with a more appropriate slide. You've heard of streaking. Well, I'd like to claim that I was the original streaker, because one time we were trying to check some facts in the winter and the ice went out, or part of the ice went out, and we couldn't get across the river by walking on the ice because it was too treacherous. There was only one way to go. This was about early March. We had to disrobe and streak across. Now, I wasn't streaking too fast here, but when I got out in the middle and the water got a little deeper....

PRES. HERBST: Thank you very much for a very good, an excellent presentation. Are there any questions?

GALE, MISSOURI: You mentioned that you modified the steel traps. I'm wondering how this was done, and, since you came up with a trap that was obviously effective in holding the wolves, did you have much trap injury?

MECH: Well, we have had trap injury. We've tried a number of different traps, and we've found that a trap with an offset jaw and with some teeth--not a whole lot of teeth, but say two or three on each side of the jaw--will hold the foot hard enough so that the animal can't slide back and forth in the trap, which is how it can do the worst damage. It's not the trap which does the damage, of course, as you're probably aware, but the animal struggling in it. So, for instance, when we catch a pup, he just lies there in the trap and doesn't do anything. The same with a lynx with a very, very

fragile foot. He just sits there.

But if you get a fighter in there and he starts thrashing around, then, if you don't have an offset jaw with some studs in there, he'll slide back and forth and cut his foot pretty badly. Over the years we've learned that, and we trap pretty much exclusively with a Number 14; that's the one which seems to minimize the damage. We still get some damage, just as the guy who goes out and darts a deer now and then kills one. Whenever you handle animals you're going to get some damage, or a certain percentage of the animals are going to have some damage. But a very low percentage is tolerable, and most of those recover soon.

SCHOENECKER, MINNESOTA: Do you have any data which show whether or not the radio collar itself has any effect on the animal's behavior?

MECH: This is a very important question that anyone doing radio tracking studies has to keep looking at all the time. All we can look at, really, is a couple of things. When we recapture the animal, is the collar doing any damage to it, such as chafing the neck? That's one thing. We don't find that. We can look at the animal's weight; has he lost any weight? We haven't found that. We can watch the animal in the pack and see whether there's any tendency for it to be picked on by the others, or anything like that. We haven't seen that. Then, fourthly, for the animals whose status we knew--like the alpha male or the alpha female--since we put the radio collar on, has he or she lost the status? We haven't seen that. That's about all I can tell you. I'm not claiming that it doesn't have some effect, but in all the things we can look at it doesn't appear to have had any.

PRES. HERBST: Another question?

BOUSHELLE, MICHIGAN: Would you like to comment on the re-introduction of wolves into Michigan?

MECH: Sure. In early March we radioed a pack, or a group of four wolves, three of which we were pretty sure were from the same pack, and then a fourth one we weren't sure of, and we released them in Upper Michigan, northwest of Marquette on the Huron Mountain Club area.

One of the wolves--the one we weren't sure was the pack member--broke off immediately from the pack and has since lived in the release area, about 60 to 80 square miles between Marquette and the Huron Mountain Club, as a lone wolf. He's definitely killed at least one deer and has lived successfully for the period.

The other three moved, as a group, about 80 miles back towards Minnesota, to the west, and then settled down in an area of about 1,500 square miles for a month. For the past six weeks they have settled down further into an area of about 250 square miles. I've heard a rumor since I last checked a week ago, that one of the wolves was hit by a car and killed. I'm not certain of that yet.

UNIDENTIFIED VOICE: Isn't there some evidence that the three have been joined by a couple or three other wolves?

MECH: No. That's a misconception. Some loggers thought they saw the radioed wolves with three others, but when we had the guys check it out, they found that two guys in the same pickup truck couldn't agree at all on the story. One said he saw one wolf cross the road and when he was in the woods there were three; the other guy said he saw four cross the road at the same time the other guy saw one. And there were other discrepancies. We've never seen wolves join up with other packs in our studies. It would be much more likely that the report was wrong than that the wolves joined up with others.

UNIDENTIFIED VOICE: What is the status of the documentary film that was being produced about this?

MECH: We're waiting to see what happens to the wolves. The footage is being accumulated, and it's just a matter of when should we stop to put it together. But I think you'll agree, we really have to know what the fate of the wolves is better than we know right now, before we can put anything on it.

PRES. HERBST: Another question, over here?

JOHNSTON, ONTARIO: Would you care to postulate on the role of beaver as a buffer prey species and its relationship to holding a young pack together? What would happen if you had a low beaver density?

MECH: As I mentioned, beaver is an important food. To some packs it may be very important. We've got some information that maybe individual packs of two or three or four animals may live almost exclusively on beaver through the summer. These same packs migrate to the deer concentrations come winter. But for the whole summer, they rely on beaver, and obviously if the beavers weren't there, those wolves would have had to try to have something else, like deer or moose, and they may not have been able to make it.

In areas where there's a problem with the food supply, that is, where the wolf density is lower than one wolf per ten square miles--it's more usual in many parts of Canada to have one wolf per 50 square miles or so--in areas like that, where food is limited, I think beaver can be a critical factor in the number of wolves you have.

PRES. HERBST: One more question only.

SHOOP (MUSKIES, INC.): Are you saying the present trend in the wolf population of the state is downward as a result of the deer?

MECH: Well, bear in mind that I can't speak about the state population, I can only speak about the population we're studying in Superior. The trend in that population in the past few years has been down. Right now, from this year to next, it's probably going to remain where it is, an estimated

30 percent lower than it has been in the last decade, and will remain that way in the next year or so, I think. But what will happen after that, I'm not sure. We have some indications now that maybe some of the deer are coming back. It's too early to say.

IRIZAWA, ONTARIO: About this breakdown and the trespasses which occurred afterward, was it usually the pattern that the trespassers were supreme or the trespasssees? Was there any pattern?

MECH: Well, we haven't seen that many actual interactions. We've seen a number of trespasses where the wolves actually got away with it--got somebody else's deer and came back in their own territory. We've only seen three trespasses where there was an interaction between packs. In one case, it was the resident animal which was injured and probably killed, but not certainly. In another case, it was the trespasser, the leader male, which was killed. In the third case, we're not certain which pack the animal belonged to. The point is, when they trespass, somebody may get hurt.

PRES. HERBST: Thank you very much, Dave.

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PRES. HERBST: At this time we're going to have a very interesting presentation. As you all know, there's quite a question of Indian treaty rights on a number of reservations throughout the nation, particularly as the rights relate to game, fish and wild rice. We've been faced with some of these problems in Minnesota, and we've reached an agreement between our department and the Chippewa tribe, particularly the Leech Lake band, as the result of a court decision; a fairly honorable agreement, we feel; one that was ratified and authorized by the state legislature.

The International Association of Game, Fish and Conservation Commissioners has formed a committee at the International level to pull in information from all the states as well as Canada on Indian treaties and how they've been handled, and where the controversy has come in different states. Les Voigt, the secretary of the department in Wisconsin, chairs this committee.

Here in Minnesota, the person who has done much of the detailed work on Indian matters, and one who I feel has done an outstanding job, is the Assistant Commissioner for Administration, Joe Alexander. Joe is formerly a conservation officer; prior to becoming assistant commissioner he was the regional chief for enforcement in the southwestern part of Minnesota. At this time I'd like to call on Joe Alexander and he will introduce the panel to you.

Panel on MANAGEMENT OF FISH AND WILDLIFE RESOURCES
UNDER INDIAN TREATIES

by

Joseph A. Alexander, Assistant Commissioner, Minnesota DNR
Bill Daugherty, U.S. Fish and Wildlife Service
Dr. Wayne Tody, Michigan DNR
Russell Stuart, North Dakota Game & Fish Department
John Popowski, South Dakota Game, Fish and Parks Commission
C.W. Threinen, Wisconsin DNR

ALEXANDER: Thank you, Commissioner. I haven't met all the panel members yet either.

Now, what I've asked them to do is to outline briefly to you the problems or anticipated problems in their respective states of Indian treaty rights or Indian fishing or hunting rights, and any court decisions they've had that might affect fish and wildlife resources within the state. Briefly, I'd like to go through a little bit of what Minnesota has had to contend with in the last couple of years.

In 1969 the Leech Lake band of Indians filed suit against the State of Minnesota, asking for complete control of the hunting and fishing rights within the boundaries of the Leech Lake Reservation. They asked for everything--licensing resorts, licensing fish, commercialization, the whole bit. We had a decision in 1971 that didn't give them everything they asked for but it gave them a pretty good slice of the pie. The court said that they could hunt and fish without state intervention on all public lands and waters within the reservation and gather wild rice. It didn't give them the power of control. This is briefing it down a great deal.

Our Commissioner had a few decisions to make. The first one was whether to appeal as high as we could go to see if we could get this decision overturned. We had some pretty good advice that we had a good appeals case; we also had some holes in the case, so we might not win exactly what we'd like to win. There was some speculation that the court might rule in favor of the Indians and grant their original request to turn the whole thing over to them.

This was a pretty tough gamble to take with the fish and game resources on Leech Lake Reservation. It originally was about 600,000 acres, all owned by the Indians; that has been diminished so they now own approximately five percent of the land, but they control a great deal of other land in trust, and the commercialization of our walleye waters within that reservation was something that we couldn't take a chance on. There was no use trying to gamble with that. We have about 20 to 30 percent of the walleye waters in the State of Minnesota contained within the original boundaries of the Leech Lake Reservation.

We immediately started trying to negotiate a settlement with the Indians

in 1971; this was about the time when I came into the department. The decision came through in December of 1971, and I have been in on it ever since.

I know most of the leaders of the Leech Lake band, I've known them for years, and this has helped a little bit. I know some of the background and I also know that the enforcement problems which we have now are not because of the settlement. We had the same problems before we ever had a Leech Lake agreement. They've been selling deer in that area for years--and walleyes--this isn't a new situation, although this is some of the criticism of our agreement, that commercialization is taking place in spite of the agreement, but it was taking place before it, too.

The agreement is working, though not as well as a lot of people would like to have it work. It's not perfect. It's getting better. We're closing up a few gaps in it. Our first year was almost a disaster in keeping the stamps sold and the licenses sold in Leech Lake. This is one of the first things like this that any state has ever attempted with its Indian community.

We had a restricted/unrestricted license. Basically, this is how it works in Leech Lake. If you go out in Minnesota to buy a license now, you're supposed to be asked by the license dealer if you want to buy a restricted or an unrestricted license. A restricted license keeps you out of the Leech Lake Reservation. You pay \$1 more for an unrestricted license, and you are allowed to hunt or fish--whichever license you're buying--within the boundaries of the original reservation. If you buy a restricted license and then change your mind and want to go into the Reservation, you buy a \$2 stamp--it doubles in price.

This is about where we are in Leech Lake. We designed a new license to try to eliminate some of the cheating that occurred with the unrestricted license. Basically, what we're doing now, rather than ask the dealer to stock two different sets of licenses, we're combining the restricted and unrestricted license. There will be a tab on it. When a customer buys the unrestricted license, he gets the tab and the whole works. If he wants it restricted, he just gets the license without the tab. We think this will eliminate one of the problems in enforcement.

We originally had seven conservation officers--Indian officers--appointed within Leech Lake Reservation. One of them quit, so there are now just six. They enforce both the Indian code and the state game and fish laws. They're doing a pretty fair job on it. The arrests on violations of the code--on this past opening day of fishing season, about 59 arrests were made over there, and the Indians made a good share of those arrests, working with our officers. Indians go to Indian courts and whites go to white court, but they can both enforce each other's laws. It's something that's been real difficult to work out. A little sensitivity training here and there has helped a bit, as far as Indian wardens are concerned, and the ones that are working with our people. The seven of them were trained by our conservation officers in the basic concepts of the state game and fish laws.

We have recently appointed, within the department, a community liaison officer who is a Chippewa Indian who was raised in the Red Lake Reservation, one of our six major reservations in the State of Minnesota, and he is doing all of our liaison work between the Indian community and the DNR. He's doing an excellent job. He's on our affirmative action team. All of the labor used on Leech Lake in erecting the signs has been Indian labor recruited by Roger Head. We're now going to take part in a school over there--at Nicollet or Vineland--that I think some of you are familiar with. We're going to send one of our recruited Indians over there to see how the program works out.

I believe Minnesota is leading the way right now in negotiations with the Indians, and with that I'd like to leave it. I'd like the rest of the panel to have a few minutes to go through some of their basics. And then we'll open it up to you for questions.

TODY: I'd like to summarize our situation in Michigan in three ways. First, I'd like to summarize the legal actions that have gone on; secondly, the events that have taken place; thirdly, offer a couple of off-hand comments if I can.

But first of all, from a legal standpoint, here's the situation. In the late 1960s an Indian by the name of Jondreau was arrested by a Michigan conservation officer for fishing without a license in Keweenaw Bay of Lake Superior. He had four illegal lake trout. He was arrested and convicted; he appealed the conviction to the Michigan Supreme Court. In 1971, the Michigan Supreme Court held that the Indian was within his rights under the old treaty, and that sort of opened this whole issue up.

Following this incident on Keweenaw Bay, a flurry of Indian activities broke out statewide in 1971. Indians--card-carrying Indians, as they quickly became known--were hunting deer year-round, spearing fish, and committing other flagrant violations, as we call them, of the state laws. By fall, there were some 50 commercial fishing operations going on of various sizes around the Great Lakes of Superior, Michigan and Huron.

During this period, another Indian was arrested in the Whitefish Bay area who claimed immunity under treaty rights. He was convicted by district court, and that opinion was upheld in circuit court. There is still an appeal pending and this is under another treaty, the Treaty of Washington, 1836, so it may go on to be another test case.

In 1971, with some 50 commercial fishing operations going on, the Michigan United Conservation Club under our state environmental protection act filed suit against the Bay Mills tribe to permanently enjoin them from commercial fishing activities. They did this in Ottawa County circuit court. The court did issue an injunction to restrain Indians from any future commercial fishing in the state, with the possible exception of Keweenaw Bay.

Last fall, the United States Attorney for the Western District of Michigan filed suit against the State of Michigan for our alleged failure to

recognize treaty-secured Indian rights, and the resolution of that case is still pending. We haven't gone to court yet, although both sides have filed briefs, and so on.

I might read a sentence of a letter from our late director Gazlay to our attorney general on this matter. I think our problem in Michigan is that we simply don't know where we stand. Following the state supreme court decision in Keweenaw Bay, he says this:

"As a result of, and during the three years since, the issuance of this opinion by the court, the majority of Indian communities and their attorneys have adamantly concluded that a descendant of an Indian tribe specifically mentioned in a particular treaty may hunt and fish on lands ceded by the treaty without regard to state laws and rules. This department, on the other hand, is of the opinion that of the eight Indian treaties applicable to the land and water mass of Michigan, the off-reservation hunting and fishing rights reserved in five of them have been extinguished by self-termination clauses; two conveyed neither hunting nor fishing rights; and the hunting and fishing rights of the remaining treaty was revoked by Executive Order of President Zachary Taylor on February 6, 1850."

We're left with a situation where the Indians contend that they do indeed have treaty rights; the state contends that, according to the treaties in question, they do not.

What has happened basically, and what the present situation--apart from the legal matters--is around the state, is this: our legislature has granted free hunting and fishing privileges to all Indians who can prove that they are really of Indian descent. They can apply for free hunting and fishing privileges. The state observes Indian rights to unrestricted hunting and fishing on reservation lands. I might mention that we only have two areas of reservation lands, one on Keweenaw Bay and the other on Whitefish Bay, both on Lake Superior.

We have advised the Indian tribes that we will issue them commercial fishing permits, tribal permits, on application, and attempt to work out an agreement as to just what this permit contains. In fact, several permits have been issued, including one for some-25,000 feet of large mesh in Whitefish Bay. But our experience is that the Indians don't appear to really want these permits or to be subject, even in that way, to state jurisdiction.

We've also introduced a program and made concerted efforts to hire Indians in the Department of Natural Resources.

On Keweenaw Bay, an Indian fishery is in operation. According to our supreme court decision, the Indians can fish on the unsold lands and in undefined areas of Lake Superior. We don't know what the catch is in this

area, but lake trout and other species are being taken and sold. The Indians are quite militant about their rights, apparently; one sport fishing boat that got too near the nets had four shots fired at it, allegedly by an Indian. Although at present it's quite quiet.

The Bay Mills Indian community, as I mentioned earlier, is restricted by a restraining order by Ottawa County circuit court. But they're continuing to fish commercially, with or without our assent, and there have been 18 cases in which we have made arrests, both for violations against state laws and for contempt of court. The prosecutor in the area is reluctant to press the charges until there is further clarification of Indian rights.

Basically, from the problem we had in 1971, it's quieted down; there's not a lot of widespread activity by Indians, although there's still a little by individuals. Both sides of this issue seem to be waiting for a definitive answer from the courts.

Now to wind this up with just a few comments. In the restraining order that our sportsmen's club sought in Ottawa County, the decisive point was that we were asked on the witness chair on the basis of potential depletion of stocks, just how many Indians would have to fish outside of state control to deplete the stocks. And we answered at least one, provided he had enough employees, vessels, and organization. The judge took that into account and, in his declaratory ruling, said that there could not be an uncontrolled fishery. Our concern, of course, is that we would like to continue with the job of rehabilitating the Great Lakes and getting an optimum output of fish. We always stick to that. How they're allocated is another matter, provided it's done with proper respect for the resource.

However, there are a few things that bother us. In reading the testimony of the lawsuit that's pending, we find that there are a number of claims by the Indians for payments and annuities that were promised to the tribe in the last century as settlements by the federal government that have apparently never been delivered. Yet, the federal government is prosecuting the State of Michigan apparently over fishing questions that may involve their earlier failure to comply with agreements. We don't quite know why this approach is taken.

Another thing that puzzles us is that in the cooperative program for rehabilitating the Great Lakes, both the states and the federal government have spent many millions of dollars. Yet we have at least one uncontrolled fishery that's going on, we think, without regard to the stock. The stocks are declining in number and the average size of the fish has been dropping rapidly.

I think we would hope that in the final settlement of this, that the Indians' treaty rights be defined, and we would also hope that we don't end up with the Indian rights handled as a federal trust, resulting in a split jurisdiction between the two levels of government. Probably, if there are rights--we don't admit that there are--these rights should be settled by

allocation of the stock within the state. Or, perhaps, Congress should consider compensation of these Indian fishing rights in much the same manner as they have compensated in disputes over land in the past.

Thank you.

ALEXANDER: One thing I was going to mention is that we are so concerned in Minnesota because we have six major reservations and a seventh that's of some importance: Red Lake, that's a closed reservation, completely owned by Indians; White Earth, that has now filed suit against us, similar to Leech Lake; Leech Lake; Nett Lake; Grand Portage; Fond du Lac; Mille Lacs; and several smaller ones--Upper Sioux and Lower Sioux down in southwestern Minnesota; a very small reservation at Prior Lake; and one near Wabasha, Mn. So we have our share of reservations to deal with in the next few years.

THREINEN: Mr. chairman and gentlemen. First, whom are we dealing with? In Wisconsin, we're dealing primarily with the Chippewa Indians, and we have, in our state, three Chipewa Indian reservations. Now, this group of Indians was given rights under treaties that were enacted or signed in 1837, 1842 and 1854. The 1837 treaty was very clear: it said that "the privilege of hunting, fishing and gathering wild rice upon the lands, rivers and lakes included in the territory ceded, is guaranteed to the Indians." I don't suppose there'd be much argument about language like that. The last treaty, the 1854 one, defined the areas for the reservations for these particular Indians of the Chippewa band.

Now, just a word about the Menominees. We have one other group of Indians which has--or had--a reservation, but the Termination Act of 1954, effective in 1961, disbanded the reservation and it became an incorporated unit in the state government and the county. It was restored as a reservation recently. So, talk about confusion, I think we have it.

There are several interesting cases and attorney general's opinions and approaches to law and I will cite some of them, only briefly, just to give you some idea of how this picture changes.

Dr. Tody alluded to the President Taylor Executive Order of 1850 which revoked the rights mentioned above in the 1837 and 1842 treaties. In other words, it revoked the fishing and hunting rights. But, subsequent interpretations were substantially different. In the opinion of the attorney general of Wisconsin in 1962, he concluded that, in the case of the Menominees, the Termination Act had terminated the hunting and fishing rights of those people in that particular reservation. But the attorney general was overruled. In The Menominee Tribe of Indians v. The United States, 391 U.S. 404 (1968), his opinion was completely overruled.

Then in 1964, the attorney general reflected in an opinion the difficulty of determining the effect of Public Law 280. The opinion cluded that under P.L. 280, the state fish and game laws are applicable to all non-patented

lands and to individual Indians within the boundaries of any Indian reservation within the State of Wisconsin. But then the attorney general came around again and shifted his opinion.

In an opinion of 1967, he said that the law was entirely clear; that there was no intent on the part of Congress to affect existing hunting, trapping, or fishing rights in any way by P.L. 280. He said the clear legislative intent was to subject the Indians to all of the criminal laws of the state, but to leave the hunting, fishing and trapping rights as they were prior to the enactment of the law. It is his opinion, therefore, that the State of Wisconsin is not free to apply its hunting, fishing and trapping laws to Indians residing on non-patented reservation lands who are hunting, fishing or trapping on non-patented lands within the confines of the reservation.

Now, we have some specific cases that are growing up in the Chippewa areas, primarily because some of these are on Lake Superior. Some of these situations are much like that described in Minnesota involving Leech Lake. We have a band over in Vilas County that has a number of very significant inland lakes. This band is trying to enforce their control of hunting and fishing within this area. They have made noises to the effect, I suppose you could say, that they want to control the hunting and fishing, and that the white man should pay for that right. A similar picture is emerging--or, at least, people are talking that way--over in a band near the Chippewa Flowage in Sawyer County.

Now, some of our more critical problems are much like Michigan's, right now, because we are trying to manage a commercial fishery up on Lake Superior. We had a limited entry fishery up there, where we limited the number of commercial fishermen. Then came a court decision which gave the Indians the right to fish as they had hunted and fished historically in that region, and so we had Indians entering what was a limited fishery. There was no control on the Indians. I can give you more detail on the court case, although I don't suppose time would allow it, but in the court case that went all the way to our state supreme court, the decision was clear: the Indians had the right to hunt and fish, and this was subject to state regulation only if we could show that there was depletion.

So what we have, in reality, is a fishery that involves participation of two groups. Now, the way we tried to handle that was to apportion the quota between the two groups. We have a quota set up on Lake Superior of 100,000 pounds, and we broke it down so that 40,000 pounds could be harvested by the commercial fishermen, 40,000 pounds by the Indians, and 20,000 pounds was left for assessment purposes. The sport fishery harvested about 50,000 pounds, according to our estimates.

The picture is clear there. The Indians are fishing relatively intensively. If we're going to enforce quotas, we face a real problem, because it's necessary that they police themselves and that they provide information on the fishery so we can tell where they are relative to the quota. We are not getting adequate reporting now.

There's another aspect of the fishery involving one of the Lake Superior bands, the Bad River band. We have a walleye fishery that enters an estuary area and the Indians fish there intensively. Of course, within the reservation boundaries, they do have the right to hunt and fish. This is almost akin to some of the problems on the west coast, where there's a salmon fishery and the salmon migrate up the stream and become vulnerable to the Indian fishery. The walleye fishery is uncontrolled in any way; we can get no information on it at the current time; and the indications we have are that this stock of fish is being fished very intensively.

What we have really is split jurisdiction in our fishery management. This always poses problems of management. I think with that, I won't say any more. There is a lot more detail regarding these cases, and there is a summary available if specific people wish it.

Thank you.

ALEXANDER: Thank you. I was just looking through some of the treaties we have here. I thought it might be a little bit interesting for some of you who've never read a treaty to hear how we paid the Chippewas for some of their land. The treaty that deals with the particular area we are in now says:

"In consideration and payments for the country hereby ceded the United States, the states agree to pay the Chippewas of Lake Superior annually for the term of 20 years the following sums, to wit: \$5,000 in coin; \$8,000 in goods, household furniture, and cooking utensils; \$3,000 in agricultural implements and cattle; carpenters' tools and other tools and building materials; and \$3,000 for moral and educational purposes, of which last sum \$300 per annum shall be paid to the Grand Portage band to enable them to maintain a school. The United States will also pay the further sum of \$90,000 as the chiefs in open council may direct."

Then it goes on to a few other things such as household furniture, cooking utensils, 200 guns, 100 rifles, 500 beaver traps, \$300 worth of ammunition, \$1,000 worth of ready made clothing to be distributed among the young men of the nation at the next annuity payment; furnish a blacksmith and an assistant; and it goes on. This is the type of payment that we were to make at the time of the 1854 treaty.

Bill, would you like to take over now?

DAUGHERTY: Indian hunting and fishing rights are in general of two sorts: those pertaining to Indian reservation lands and those pertaining to non-reservation (generally ceded) lands.

Since Indian hunting and fishing rights are in some respects property rights, I think it is important that we understand how reservations were est-

ablished.

There are three types of Indian reservations: those created by treaties prior to 1871; those created by Acts of Congress since 1871; and those made by Executive Orders, whereby the President set apart public lands for the use of the Indians. Treaty reservations were established by (1) the recognition of aboriginal title, (2) the exchange of lands, and (3) the purchase of lands.

Sporadically, during the treaty-making period and regularly since its expiration, tribal property rights in land have been established by Congress. These acts vary from specific grants of fee simple rights to broad designations that a given area shall be used for the benefit of Indians, or that Indian occupancy of designated areas shall be respected by third parties. A common type of such legislation reserves a portion of the public domain from entry or sale and dedicates the reserved area to Indian use. Another type authorizes purchase of private lands for Indian use, and another method is the exchange of private lands for public lands.

The practice of establishing Indian reservations by Executive Order goes back to 1855, but now any new reservation boundaries must be set by Acts of Congress.

In addition to reservation areas, the tribes may purchase land with their own funds, or, in some cases, the Secretary of the Interior may purchase lands for Indian tribes.

Now, with that brief outline of Indian lands, let's look at the more controversial area of off-reservation and off-tribal-land hunting and fishing.

Where a provision of an Indian treaty reserved to members of a tribe the right to take fish "at all the usual and accustomed places, in common" with the settlers, it has been determined that this means sharing equally the opportunity to take fish.

Thus, from a recent court decision, both treaty and nontreaty fishermen shall have the opportunity to take up to 50 percent of the harvestable number of fish taken outside Indian reservations. Harvestable number of fish means fish not needed for spawning escapement, or for Indian direct subsistence, or traditional tribal ceremonies.

Probably all of you are up-to-date on the off-reservation fishing case in Washington. I had intended to go over a few cases briefly, but one Bill (Threinen) has already discussed--the Menominee case--where even though the Termination Act was passed, the Indians still retained, through the court process, their hunting and fishing rights.

Another case that should be of interest, or at least stimulate some thought on the problem, is the case of Idaho v. Tinno. Gerald Tinno was an enrolled member of the Shoshone-Bannock Tribe of Indians, and was charged with taking a chinook salmon with a spear from the Yankee Fork of the Salmon River in 1968. Both spear fishing and taking salmon at that particular time

and location were in violation of state fishing regulations.

The Idaho Supreme Court construed the Fort Bridger Treaty hunting provision as including fishing, notwithstanding the failure to use the term "fishing."

The court stated that the treaty hunting and fishing rights were not limited to the ceded area. The signatory Indians had roamed at will and did not in a strict sense occupy the land they roamed, but harvested game, fish and other foods and moved about with seasonal changes.

The court noted that Indians usually do not hunt or fish for the reasons that motivate ordinary sportsmen. It went on to state that "the exercise of an unqualified treaty right to fish, by spearing a chinook salmon....could not be regulated by the state unless it clearly proves that regulation of the treaty Indians in question to be necessary for preservation of the fishery." And further, "To require less of the state would emasculate the treaty rights." Special consideration which must be accorded the treaty is that "treaty fishing must focus on the historical reason for the fishing right."

Most of you know, but I'll quickly review, how the Fish and Wildlife Service is involved in Indian programs.

The Secretary of the Interior, acting through the Commissioner for Indian Affairs, exercises this nation's trust responsibility for approximately 488,000 Indians who reside on or near about 50 million acres of reservation lands.

The Bureau of Indian Affairs, as an agent of the Secretary of the Interior, is the legal trustee for the land and water rights of the Indians, and assists the Indian people in developing their natural and human resources.

The Fish and Wildlife Service is the fact-finding and scientific authority within the Department of the Interior on fishery and wildlife matters. As agents of the Secretary, the Fish and Wildlife Service assists in carrying out the trust responsibility by advising the Bureau and tribal entities on such fish and wildlife matters, and we prepare fish and wildlife management plans as required after appropriate field investigations. The primary responsibility for execution of fish and wildlife management programs in the field rests with the local office of the Bureau of Indian Affairs and the tribes, with such aid and assistance as the Fish and Wildlife Service may provide.

ALEXANDER: Thank you, Bill. Mr. Popowski, now.

POPOWSKI: I think it's pretty obvious, by the comments made up to now, that our problems are pretty universal. They are, I think, nonetheless severable because the rights of tribal members are dependent upon separate treaties. In a state like South Dakota where we have nine separate tribes, we have nine separate problems. Basically, the problems arise because of varying interpretations of the extent of jurisdiction of the three entities

involved--the federal government, the state and the tribe itself.

Interpretations are complicated by court decisions, many of which conflict with each other, and federal legislation. In South Dakota, Indian reservations which have been judicially declared open reservations for the last 70 years have not been judicially declared to be exempt from state jurisdiction. A particular reservation in point is the Lake Traverse reservation in the northeastern part of the state, which slopes over, to Russ Stuart's chagrin, into North Dakota a little bit.

In the past, our enforcement people have treated Indians and non-Indians alike on that reservation. But in the last year or so, the court has changed this. Not long ago I spent a day with our conservation officers and parks people up there in regard to how they should handle enforcement of our various problems on that reservation. It's kind of tough to get some of those people, when they decide a fellow is an Indian, to turn their backs and walk away. We just haven't been doing that in the past.

On four of our reservations, the treaty rights of Indians to hunt and fish have been affected by federal legislation creating the Great Missouri River Reservoirs, even though such legislation was for a purpose other than to establish, diminish, or expand such Indian hunting or fishing rights. It would be, obviously, most helpful if the U.S. Congress were to legislatively clarify the conflicting treaties, statutes, and court cases. But since congress has not done that in the last 100 years, it's well for us to seek other solutions rather than to wait for them to act.

The most effective tool in solving or circumventing some of the many problems in South Dakota has been a legislatively-established state Indian task force, set up and funded by the 1973 state legislature. The task force is composed of nine representatives, one from each of the Indian tribes, and an equal number of non-Indians, most of whom are state legislators. The task force holds regular meetings around the state.

The task force started out by exploring motor vehicle situations with the tribes; state income tax collected from Indians on reservations; revenue problems on the reservations. At the 1974 session of our state legislature, the task force caused to be introduced eight different pieces of legislation. Seven of those eight were passed. Now, I don't know how it is where you come from, in your state or province, but that's a pretty good average. I have no reason to think that additional legislation about hunting and fishing won't have the same batting average. The task force has, within the last six or eight months, got into this hunting and fishing situation, and they're working, I think, in the only direction that we have to go.

Initially, the task force came up with about a 25-page model agreement to be used between the various tribes and the state. We took a look at their proposed model agreement and revised the parts that related to hunting and fishing, and cut out the propaganda that didn't really get to the heart of the matter. We came up, then, with a three-page document that we sent back

to them, and we've compromised now on about a five-page document which our commission has looked at and has agreed, as a model, to use it in future seasons regarding hunting and fishing.

Although the exact details of an agreement require negotiations between our commission and the tribes, it generally provides for identical seasons, set both by our commission and the tribe; identical regulations regarding prohibited or proscribed methods of taking; licensing by both state and the tribe; and cooperative law enforcement.

We further run into problems in South Dakota because some of these tribes have no hunting or fishing tribal codes. In other words, they themselves can't tell us who can hunt, or who can't hunt; what the specific requirements of their tribal members or non-tribal members are; if they give a small game or a big game license and how much it is; and things like that.

Needless to say, we have a good many more problems than we have solutions. But we do have evidence that the agreement is to some extent successful. We have one reservation, the Lower Brule Reservation, south of here on the west side of the Missouri River, which for the last two years has come to the commission and said, "We would like you to establish this particular type of a season." And we've done that. We've established exactly the season, on just the reservation, that they were interested in. The result is that we can tell anybody exactly what they can or can't do on that reservation, and how long the season is, regardless of who's there. We really are working in South Dakota on a tribe by tribe basis.

Up to this point, that's about where it stands.

ALEXANDER: South Dakota, with its research into the Lake Traverse treaty, kind of shook up Minnesota a little bit. There's a very good indication that the Lake Traverse Treaty extends over into Minnesota too, the entire body of water. So I think that Minnesota, North and South Dakota are all three going to share in that problem. Mr. Stuart, would you like to take over for a little while?

STUART: In checking this out the other day, I found that one census indicates that we have about 15,000 Indians in North Dakota. Now, you know, North Dakota is rather sparsely populated, so that our population of Indians represents roughly two percent of our total human population. It is a very small minority, but sometimes I wonder how such a small minority can cause such a major headache.

We have three reservations totally within the state; we have two that we share with our sister state, South Dakota, one that John mentioned over in the extreme southeastern corner of the state, and a rather large one in the central part of the two states that extends--or did, until the river was dammed--up and down the west side of the Missouri River.

I'm not too familiar with the treaties in North Dakota. One of the

things that maybe I should mention, we do have a lot of tribes in North Dakota, and maybe this is an asset insofar as the legal problems are concerned.

On Fort Berthold, which is on the upper Missouri in North Dakota, we have what is known as the three affiliated tribes, and they're the Iroquois, the Mandan, and the Choctaw (?). We have a small reservation in the Devil's Lake area that is peopled with Sioux, and most of these I believe are from the Sisseton and Wapeton tribes. We have a Chippewa tribe, this is the largest, which comprises about half of all our Indians, in the Turtle Mountain area, practically on the Canadian border. We also have another tribe of Sioux, primarily the Dakotas, on the Standing Rock, which is the big reservation we share with South Dakota.

We have tried to work with the various tribes and tribal councils in setting up game management plans for the reservations. My first experience was back in 1941, when the Chippewa tribe of the Turtle Mountain Reservation Council came to the department and asked us to set up a game management program for the reservation. We spent a considerable bit of time on it, took it up, presented it to the Council, they accepted it; about three months later, they had an election on the reservation, and the next day we had an entirely new tribal council which, of course, rejected this agreement because it had no part in making it.

One of the big problems that we face in North Dakota is the Corps of Engineers. When you come right down to it, most of the problems that we have are due to action of the federal government or federal agencies. For example, the Garrison Dam, built by the Corps of Engineers some 20-odd years ago, involved inundating a considerable amount of the Fort Berthold Reservation lands. Money was appropriated by Congress and the hunting and fishing rights to the land which was inundated as well as that which was required for management purposes adjacent to it, were purchased by the Corps of Engineers, I believe, for some seven million dollars.

Just a few years later, they started on the Oahe Dam, which is actually situated at Pierre, South Dakota, but backs water up almost to Bismarck, in other words, about 90 river miles. They failed to do this. So that right now, the whites can, if they do not have to trespass on Indian land, hunt and fish on that portion of the reservoir bordering the Berthold Reservation without any problem. However, if they go south of Bismarck to the Oahe reservoir, then real problems arise, because the Indians claim, and rightfully so, that they still retain the hunting and fishing rights there.

Another thing that the Corps did, of course, was fail to survey and mark the line, so that, in rather rough terrain, a person doesn't know whether he's on tribal lands or on lands owned by the federal government. So we've had problems, some rather serious problems, where Indians have come on people who are camping and have robbed them and actually chased them out of the area at night; and especially if it's a family with a few small children, it's very upsetting, and very likely the next day I'll get a telephone call from some mother who is protesting.

I think our basic philosophy is entirely wrong. I think we in the north, over the years when we've had racial problems in the United States, have been a little bit smug. But actually, we have practiced perhaps the worst kind of segregation, far worse than it was ever practiced anywhere else in the United States. We actually go so far--and I've chided my highway commissioner about this--but we actually put, on our official state highway maps, a different color designating the segregated areas, in other words, the reservations. I think it's high time we drop that.

I think it's high time we recognize that the reservation system has not worked; we haven't solved the problem of the Indians by having them in reservations. I think the first thing we should do to start alleviating and correcting the problem is do away with the Bureau of Indian affairs and then, secondly, do away with the reservation lines.

We must get these Indians to recognize that they are citizens, that they have all the rights of any other group, but along with that right of citizenship they have some very direct responsibilities. Right now, many of the reservation Indians feel that their little area is actually a sovereign nation. Now, there's no time in history when you can have one sovereign nation within another. It cannot work. If we are ever going to solve these problems, I think we're going to have to start thinking a little differently from how we've thought in the past, and we're going to have to get to our politicians and get them to consider that maybe the few Indian votes picked up by getting a certain bill through Congress do not, really, do the Indian any good.

ALEXANDER: Thank you. We'll open it up for questions now.

STRONG, COLORADO: I wonder if it's possible to get briefs from each of you. The southern Utes have gone on the warpath; they're in court over hunting violations. They maintain that they can hunt on any Indian land or former Indian lands, which means in my case, much of Colorado. We would like to obtain briefs if at all possible. We're afraid if this thing goes to Washington and Henry Kissinger gets in on it, they'll probably end up with an atomic bomb.

ALEXANDER: I'll tell you what we'll do. We'll get a list of all of the commissioners and states represented here, and we'll send them all to you.

THREINEN: There is the IGAFIC Indian committee, and what we have done for that--Les Voigt is the chairman of that--is pull together the cases throughout the country. Now, that's going to be presented at the International meeting in Honolulu in September, and that information will be available in the proceedings. So you will have a digest of everything that's available on the subject of the Indians, and you'll have references. Maybe that would serve your need.

SCHARA (TRIBUNE): I'd like to ask Mr. Popowski if your hunting and fishing seasons match those of the reservations, or vice versa, and if you sell licenses to both Indians and whites on reservations and also sell licenses to

persons to hunt there?

POPOWSKI: We don't, Ron. We don't have concurrent licensing regulations on most all these reservations. Within the last two weeks, for example, on the Lake Traverse Reservation, the tribe has said that non-Indians could fish by buying a tribal license, that there will be no hunting by non-Indians within the original boundaries of that reservation. The particular reservation is now about 85 percent owned by non-Indians. Approximately 15 percent within the original boundary line is still Indian tribal or trust land. As you know, it's some of our better white-tailed deer country. We have about 90 percent hunter success up there. We've been continually jacking up licenses because we're continually having problems; if we can't harvest those critters one way or another, the non-Indian owners who are the great bulk of the land area owners up there, are going to have problems.

SCHARA: I thought you said this task force had worked out a plan which provides identical hunting and fishing seasons and regulations and licensing through both state of both Indians and non-Indians.

POPOWSKI: The task force has been working out a model agreement which still has to be accepted by the tribes. Our commission has said we would work with any tribe on the basis of this model agreement. There's only one tribe so far, and only one season, that's a big game season of deer and antelope, that's accepted. This is a proposal, a model agreement to be used in the future. I've got a copy of it here which you're welcome to. One part says, for example, that if the state charges \$8.50 for a big game license, then the tribe is entitled to an equal amount, and the department collects it for both.

ALEXANDER: Anyone else have questions:

DAHL (LAKE SUPERIOR STEELHEAD ASSN.): I have a point. When the states go to the court to plead the case, has a state ever brought up the subject of the imported game or fish that are stocked? The things such as trout or pheasants that are not native?

ALEXANDER: I can answer for Minnesota. It was brought up in our Leech Lake case that all of the aboriginal rights claimed in that case did not necessarily deal with aboriginal species, if that's the right term. There had been an awful lot of stuff done there for them, fish planning and stocking, this sort of thing. It was brought up that the land wasn't in the completely natural state that it was at the time that they're seeking to get the rights back to. We brought it up in our case and we're doing it in the White Earth case that's going into court. We're researching very thoroughly to find out just what has been put into that reservation as far as state facilities and state stocking. It will be a very big part of the case, I'm sure.

DAHL: If the species is not native to the water itself, and never was, for instance, the Chinook salmon put into Lake Superior, what does the law say about the Indian having those fish?

ALEXANDER: I can't answer that. Maybe one of the other panelists can.

UNIDENTIFIED VOICE: The law so far in our state just deals with those species like it does with any other species; it doesn't differentiate.

THREINEN: The Indians clearly have, according to the court decisions, the right to hunt and fish. And they have that right in Lake Superior. The court doesn't specify what species or under what circumstances. Now, if the state is stocking those waters, the Indians have the right to share in that common resource.

In Wisconsin, where we have a limited fishery with a quota set at 100,000 pounds, the Indians' share in that fishery has been set at 40,000 pounds. Now in the case of the Boll decision out in Washington, the decision was that the Indians were entitled to have the fish. As it works out, with the dammed up Columbia River at the present time, a large part of those fish are stocked fish. Now, you can argue and discuss the quities of the thing, and if the state is supplying management services through its sportsmen's licenses and commercial fishing licensing, etc., that's a good political argument. We don't have the answer here.

PRES. HERBST: I would just comment on one other interesting fact. As you know, in our state the Justice Department joined with the Indians as a plaintiff. The situation became, in court, the Indians and the federal government said this is what the treaty meant; the judge looked at the state kind of with the feeling, well, if the Indians and the federal government that originally signed the treaty, both parties to the treaty, say this is what the treaty means, what are you guys doing in here? We were like an interloper.

ALEXANDER: Does anyone else have anything?

TODY: How many states have had suits filed against them by the United States?

ALEXANDER: Oh, I can't answer that. If I were to give you a real quick answer, I'd say in Minnesota, Washington, Colorado--the federal government is going to go in on all these hunting and fishing cases. It will be the Indian tribe or band and the federal government against the state. We were kind of wondering about that, too, because back when these treaties were made, in 1854, we weren't even a state.

Any more questions? One thing that I would like to say, and I think the Commissioner would tell you this also, is that those of you who are faced with these cases shouldn't let any of the documents go unlooked at that are in your archives or in your statehouse or in Washington. We have a young lady now researching everything we can find, and we hope that somewhere down in the archives, buried in the basement in some box, is some letter or some signed document that will help us out a bit in the White Earth case. Otherwise,

we'll be faced with about the same thing. Take anything you can get.

THREINEN: I'd like to pose a little dilemma, if I could. In the case of one of the Wisconsin reservations, the Menominee tribe was given 12 townships. They subsequently sold two townships to the Stockbridge-Muncie Indians. Sold them, for cash. Now, whose rights for hunting and fishing prevail?

PRES. HERBST: Any further comments? One more here.

ENSIGN, WISCONSIN: I was wondering. Are the states with reservations withholding services such as stocking and management plans, or are they going ahead and treating the reservations as any other part of the state?

PRES. HERBST: The answer in Minnesota is no, we're continuing our management effort. However, we did point out in court that if the Indians were given exclusive jurisdiction, our investment, management, protection and enforcement would not continue. Any further comments? If not, let's give Joe Alexander and the panel a big hand.

The meeting is adjourned until tomorrow.

* * *

Second General Session - Wednesday, July 17, a.m.

PRES. HERBST: I call this meeting to order. We'll hold our business session this morning. I have a few announcements before we get started: 1) We will skip the committee report on awards until tomorrow. 2) Of interest to some of you, Minnesota will announce its 1974 hunting seasons at 10 a.m. today. 3) I will have to leave at noon today. I've been called by Judge Lord into court this afternoon on the Reserve Mining situation, but I will try to get back this evening. If I'm not back, the vice-president will have to take over for this evening's session. Unfortunately, at these meetings I always miss the enjoyable part, the fishing and so on, but I can't get out of a court session.

At this time, we'd like a short report from Dr. Al Berner on the meeting with the National Highway Association. He represented our Midwest Association and would like to report on that to us.

BERNER, MINNESOTA: On July 9th I flew to Washington and met with the task force for environmental design from the American Association of State Highways and Transportation Officials, which is quite a diverse group. The task force's purpose is to provide guidelines for highway planners and personnel dealing with wildlife populations and wildlife habitats.

I think this shows a strong interest and, if we look over the recent impact statements that they've had to write, I think they're suddenly realizing that maybe this is the way to go. So I think it's a good thing that the Midwest Fish and Wildlife Commissioners were represented at this meeting.

The meeting was just a workshop to get the task force rolling. As I mentioned, it's quite a diverse group--they had a chairman from the state of Washington, members from Texas and Florida and from all over the country--so there was a good cross-section as far as the problems of highway design and wildlife are concerned.

The chairman of the task force was--he just casually mentioned it--a little disappointed that more wildlife groups didn't show up, but there were representatives from the Wildlife Society, the National Wildlife Federation, the Wildlife Management Institute, the Council on Environmental Quality, the Fish and Wildlife Service International, and the Midwest and U.S. Forest Service. I may have omitted one or two others.

Now, you can't accomplish too much in the sense of getting a lot of writing done and coming up the general overall purpose of the task force, because to set up guidelines that will accommodate the diversity of the country will take a lot of work.

But I think the man-to-man discussions on a one-to-one basis between a wildlife person and a highway designer were very important, because you get

an idea of what their problems are, what they're thinking, what they're looking for, and so on. I think this discussion helped to give insight into the similarities and differences in views held by the two different groups on the topic of the relationship of highways to wildlife. And also, the workshop discussions helped lay a very basic groundwork in accomplishing the goals of the task force.

The response by the highway task force members, I think, really indicated that the time is ripe for constructive coordination between the wildlife interests and the highway interests, and I think we're going to see more and more of this at the state level.

All in all, I feel that this meeting was very beneficial to those representing wildlife and those building highways. I felt the group from the highways was very open-minded; this particular task force was primarily concerned with the environment and the desire to reduce problems at an early stage in planning. Many expressed a tremendous need for a close relationship between the various highway divisions and fish and wildlife crews.

Also, mentioned often was the need for a person either with the Game & Fish Division or with the Highway Dept. who would be primarily concerned with the positive and the negative aspects of highways as related to wildlife and wildlife habitats. I think that was the big accomplishment of this meeting.

PRES. HERBST: Thank you very much, Al. At this time, we'll have a report from Carl Noren about the Pro Hunt Committee.

NOREN, MISSOURI: Your Pro Hunt Committee, which I think you know is a committee created for the purpose of trying to meet the problem of anti-hunting sentiment, held no meetings during the past year but has carried on its assignment through correspondence. In 1973 we sent a questionnaire to all states and provinces in an effort to evaluate the extent and nature of anti-hunting sentiment. Most respondents indicated a belief that the problem was not serious in their locality, but that it seemed to be growing and probably was more serious elsewhere. I think it's rather interesting that we hear so much talk about anti-hunting sentiment, and yet each of the specific areas, with rare exceptions, felt it wasn't terribly serious in their area. Yet I think no one denies that it is a serious problem.

It was generally agreed that the best approach was to attempt to work with those who do not personally hunt or fish, but who are not necessarily opposed to hunting and fishing by others. It was agreed also that conservation agencies need to expand their efforts in education and public relations.

The committee decided that the next logical step was to determine more specifically what was being done to promote public understanding and better relations with non-hunters. In early May we sent a memorandum to all state and provincial fish and wildlife directors asking for a brief statement of how they are trying to improve attitudes toward hunting, and asking for

three sample copies of their best article, speech or other printed matter dealing with the benefits and the favorable aspects of hunting or opposing anti-hunting sentiment. Response to this request has been literally overwhelming.

Originally, we had planned to screen the material and bring samples of the best to this meeting for possible reproduction in the proceedings. The great volume of material received soon convinced us that we could not possibly make an adequate review of it before this meeting. About 37 states and provinces have responded to our request, some as recently as last week. Unfortunately, many agencies sent only one copy of their printed matter, thus requiring its circulation among committee members for screening purposes.

Our next step will be to perform the actual evaluation. We believe this might best be done by information-education specialists, and propose to establish a subcommittee with one member to be named by each member of the Pro Hunt Committee. The subcommittee would begin its review of the printed matter soon, and early next year would meet to discuss the publications and to formulate recommendations to the Pro Hunt Committee as to those which seem most likely to succeed in improving public attitudes toward hunting.

The Pro Hunt Committee would evaluate those recommendations and report back to the Association at its 1975 meeting, probably with copies of the publications considered most effective. We seek your concurrence in the procedures outlined, and I thank everybody for their cooperation and response.

Committee members are: Mike Casey, Minnesota; Fred Priewert, Iowa; Carl Noren, chairman, Missouri.

PRES. HERBST: Are there any questions before Carl leaves the platform? If I hear no objection, then, the chair will agree with the procedures suggested. Thank you.

We'll move on, then, to our Water Resources Committee. Will Barbee, from the State of Nebraska.

BARBEE, NEBRASKA: Thank you, Bob. The importance of water resources to the states making up this Association is reflected in the resolutions adopted in past meetings. Six of the 23 resolutions in 1973 were directly related to water conservation, water quality or wetlands habitats.

Progress has been made in basic legislation, at both state and federal levels, in the management of this most important resource. New or strengthened legislation is still needed but of prime importance to these assembled states making up this association is a concerted effort to implement to the limit of existing legislation the tools we now have to work with.

As an Association we need to develop a list of projects and program priorities to work on that are within the realm of realization.

The Water Bank Program, Title X of the 1973 Agricultural Act, and the drive now underway to amend the Coordination Act stand as evidence of what can be accomplished where an all-out effort is focussed on an objective.

Such a list might include:

1. Land use policy legislation.
2. An in-depth study of the Fish and Wildlife Service Wetlands Acquisition program.
3. Further amendments to the Federal Water Project Recreation Act--P.L. 89-72.
4. Demands on water and the degradation of water quality by developments to meet our energy, mineral and fiber needs.
5. Impoundment of funds authorized for implementation of existing programs.
6. Power plant siting and the routing of transmission lines.
7. Maximize the use of remote sensing laboratories' information in wildlife habitat inventories.

There are others but these are a few that are of concern to the states and provinces assembled here.

This is not to imply that the Midwest Association would not vigorously support good water resource legislation coming before Congress, but would look to and coordinate with other regional associations taking the initiative on legislation of particular regional concern.

It is hereby recommended that the Water Resources Committee of the International Association assume the leadership in the assignment of specific tasks associated with the gathering of supportive data and the fostering the introduction of needed legislation at the federal level and the developments of model legislation for state purposes.

That is the report of the Water Resources Committee, Mr. chairman.

Committee members are: Anthony Dean, Illinois; G. E. Couldwell, Saskatchewan; Willard Barbee, chairman, Nebraska.

PRES. HERBST: Thank you. Are there any questions of Will? If not, we'll proceed to Fred Prielwert, the liaison with the Pheasant Council, for his report.

PRIEWERT, IOWA: Thank you, Bob. The Midwest Pheasant Council has now

been in existence since 1957 as duly constituted by the Association of Midwest Fish and Wildlife Commissioners. The objectives of the Council, as listed in the Association's resolution, are:

- A. To prepare lists of needed research projects and mutually adopted principles of pheasant research findings.
- B. To agree on areas in which specialized research should be carried out, and, with their concurrence, suggest these researches to the states with the best facilities and technicians for the assignments.
- C. To carry out research assignments as may be directed to the Council by the Association.
- D. To hold one or more annual meetings for the purpose of presentation, exchange and discussion of research findings and experience on all subjects related to the biology and management of the pheasant and to prepare reports for presentation to the Midwest Association at its annual meeting or by circularized reports.
- E. To conduct cooperative studies in population distribution and densities, harvest, physiology, ecology and other studies significant in the research and management of the pheasant.

The Council has served ably as a technical committee to meet these objectives.

The Association liaison committee (Fred Priewert, sole member) and special committee (Fred Priewert, chairman, Carl Noren and Willard Barbee) have been in contact with the Council in order to reappraise the membership, goals and responsibilities of the Council. We feel the Council has a vital role to play as a technical arm of the Association. We see the following beneficial functions as being performed by the Council:

1. To serve as a forum for the annual exchange of management and research information.
2. To coordinate research projects and research and survey results. The Council has functioned as a clearinghouse in the past for such things as range maps, population surveys, and season recommendations. The symposium to be published that was presented in St. Louis was in large part the result of activities of the Pheasant Council.
3. To serve as a uniting organization whereby all member state agencies can act collectively to influence federal programs, especially the federal farm program, that have an impact on farm game.
4. To serve as a technical advisory group for the association.

However, in order to allow the Council to serve in this manner, some changes are necessary. The Council at its April, 1974, meeting in Toledo,

Ohio, devoted one-half day to discussion of the future directions of the Council. The Council's discussion was broad-ranging and free-wheeling. The following proposals are made by the Midwest Pheasant Council:

1. To change the basic format of future meetings to devote a day of the meeting to a workshop with a central theme of discussion.
2. To broaden the membership of the Council to include management personnel by amending the constitution to read: Membership in the Council shall be composed only of those persons actively engaged in pheasant research and management in the sixteen (16) member states and provinces.
3. To continue with annual meetings.
4. To accept the invitation of Nebraska to host the next meeting.
5. To establish a program committee for next year's meeting to prepare a program with a workshop theme of nesting cover. The committee is: Chairman, G. Nason, Nebraska; W. Snyder, Colorado; B. Joselyn, Illinois.
6. To invite the Association's liaison committee chairman in addition to the host state's director to attend future Council meetings.
7. To ask the Association for suggestions of future workshop themes.

We feel that by adopting these proposals made by the Council the Association would be broadening the base of the Council and receiving increased benefits from this technical committee. It would be most beneficial if each member state would send a staff level management man as well as a research man to the Council. The addition of a staff level man should allow the Council to be active in quasi-political areas such as the federal farm programs. In addition, we feel that the Association has the responsibility to become involved with the Council and its activities.

It is then our recommendation that the Association adopt the above proposals presented by the Council. We further recommend that the Council be given the latitude to become involved in efforts to modify federal programs for the benefit of wildlife.

That, Bob, is our report. I would, after the adoption or rejection of it, like to make some personal comments on this committee.

PRES. HERBST: Are there any questions first? Do we have a motion to adopt the recommendations of the report?

STUART, NORTH DAKOTA: Mr. Chairman, why doesn't he make the comments first?

PRIEWERT: All right, Russell, I will. In the process of being on this

committee and working with some of the pheasant people and Carl and Willard, a few things became evident, and this is just what I saw and what I feel. What it's worth I don't care, but I wanted to say it.

I would like to take this opportunity to express myself, based on input from my wildlife people, on the relationship between the Council and the Association. I think the Association and the Council would be better served if the Association's Liaison Committee had two members, and if these two directors each appointed a staff level man in their organization to maintain contact with the Council. The directors are much too busy to perform a liaison function directly with the Council.

It seems that certain members of the Association are very anxious to take a swipe at the research biologists of the Council. However, perhaps these Association members should dig around and make sure their management people are applying the research results they have on hand. Also, most states do not have straight research biologists. Those biologists that are called research biologists are often involved in management activities.

The Association seems to be very biased in its activities (time and energy) towards waterfowl. One wonders if the pheasant or any other resident game species is getting the attention from the Association that it merits. Has the Association considered the dollar inputs the pheasant makes to the state agencies in relation to the time, energy and money the pheasant resource gets back?

It is my personal feeling that the members of the Council are willing and able to strive for changes in federal programs such as the farm program if the Association will give such Council activities approval. Past resolutions of the Council and requests for guidance from the Association by the Council have either been passed and forgotten or ignored. These actions (inactions?) by the Association have had the general effect of making the Council feel that the Association has very little interest in the Council's activities.

Personally, I would welcome the addition of management biologists to the Council. I really do not care who does the job, just so it gets done.

PRES. HERBST: Now, are there any questions?

BARBEE, NEBRASKA: First, I want to apologize for not getting in writing to our committee chairman some of my thoughts after I received his draft of this report. It occurs to me that perhaps, Fred, our biologists ought to stay in the area of biology, and the business of the political contacts in Washington to influence legislation and that sort of thing perhaps should be left to administrators, if the administrators will do it.

PRIEWERT: Yes, that's the key.

BARBEE: A couple of years ago, the Pheasant Council worked diligently

in preparing and drafting reports and things of interest and concern to the House subcommittee looking at agricultural legislation. Time was getting on and debate was going on that day and (name unintelligible) eventually came to me in Washington, D. C., and I finally said, "Well, so far as I'm concerned, you have my concurrence in going over on the Hill and presenting your report." Because apparently nobody in the area of fish and game administration was going to get there. But I do have some mental reservations, and I want to raise the point here, about our biologists getting involved in the area of legislation.

PRIEWERT: Well, I won't argue with that position. I think the highest guy on the pole should go, because he carries a little more weight. But if we have ignored our responsibility, I'd rather have them (the biologists) go than nobody. I think we're to blame. We can't do everything all the time, I recognize that too, but, my God, fighting feds is about a full-time job.

PRES. HERBST: That's the first speech I've heard you give when you haven't had the Corps spelled out some place.

PRIEWERT: I just came back from Washington for that.

NELSON, MINNESOTA: As a management biologist I've participated in these farm programs, and I've been a long-time member in past years of the Pheasant Council. I see the value of your approach here. I would repeat that (unintelligible) what you've recommended there, the joining of both management and research disciplines. My impression of what you're trying to achieve is that the research people will still come up with the guts of the information that you need, and your staff management man from the individual states would be then the bio-politician, or whatever it is that you want to apply to the farm program, and do lobbying in Washington dealing with your Congressman. This is a very important thing. I agree that I don't think biologists can and should be doing it. That's too broad a sweep for a biologist.

PRIEWERT: Good place to let them get their feet wet, though.

NELSON: Well, but you've got to make progress, too, though, and I don't think that's the place for---

PRIEWERT: No, I don't either, but when I go in I like to take one or two with me, because they've got the hard data.

NELSON: Oh yes, but it's your management specialists that I think you should be thinking of here. You should be thinking of people with this capacity to work with Congressmen.

PRIEWERT: Well, I just think we haven't paid enough attention to the Council. It's kind of like the bastard child at the family picnic, you know, they just kind of shove him aside.

PRES. HERBST: Any more questions?

STUART, NORTH DAKOTA: I agree with both you and Maynard that we should get some management people in the act. Perhaps some of these remarks were aimed at me, because I did question the activities of the Council two years ago. The point is that two years ago, when this thing brewed, we had two people who were doing a tremendous amount of work on this. As a matter of fact, there was a meeting called by the Minnesota Department and I believe 13 states were represented.

We had the Wildlife Management Institute converse with Keith Harmon and about that time others got into the arena. I was very much concerned because we had a lot at stake in Washington, and I felt that these people were far better qualified to go to Washington and testify because they were pros in this line, and this is where the controversy got under way. But I do agree with you that if we get management people on this Council, as well as research people, that maybe it will be more profitable.

BERNER, MINNESOTA: As past president of the Council, I think one of the things that should be looked at is this: The Council was tied, in the attitude of the research biologists who stay in their labs--and basically, that's where they're going to stay--but without the close coordination with the Association members who are politicians and pushing in this information--but they didn't apparently feel the Council should be the one that said, 'Hey, guys, we need you to get up there and do it.' We had this other program formed by past and present Council members, mainly (unintelligible), and it ended up, if you look at the people who gathered the data on it, that almost every one of them was a Council member. In fact, in most cases they were the delegates. So the Council is so influential in the "corn programs" that it would be sort of ridiculous to have something else to (unintelligible). So basically, though the things you have right now with the Association.

PRES. HERBST: Do we have a motion, then, to adopt the procedures recommended and consider the possibility of both management and research people being on the Council? Made by Russ Stuart. Motion made and seconded. Any further questions? Call for the vote. All those in favor signify by saying aye. Those opposed. The motion passes.

I remember President Kennedy once, when he had some question before his Cabinet, and it went all around, and everyone voted against it, when it came to him he said, "The ayes have it."

At this time we shall call upon the Legislative Committee and Les Voigt, of course, the chairman. He had to leave yesterday so a representative from Wisconsin will report for Les and the committee.

KLEPINGER, WISCONSIN: Thank you, Mr. Chairman. For those of you who don't know me, I'm Kent Klepinger with the Department of Natural Resources in Wisconsin. Les has asked me to fill in for him and to handle the Legislative Committee report. I'm also going to ask a couple of people to comment in particular on several bills.

I have prepared a summary here. We've taken the liberty of categorizing the material that Chairman Herbst sent out as Chairman of the Legislative Committee of the International Association. We've put it in a subject area, and copies are available for you if you're interested.

I think most important, and I think the thing that most of us are interested in at the current time, is the Fish and Wildlife Coordination Act. I understand that both Dave Vesall and Carl Noren attended the hearings in Washington on this bill. Fred was there too. I would appreciate it if one of you who attended the briefing and the hearings would comment just briefly. I understand the hearings are now completed and we may get action, perhaps in this session of congress. Would any one of you like to comment briefly on the status or on what went on at the hearings?

PRIEWERT, IOWA: I can comment if you want me to, and maybe Dave could add what I forget. There were 12 directors of their representatives, including Arnett from California, Earle Frye there as president of the International, Dave from Minnesota, I was there from Iowa, someone from Colorado, Tennessee, Pennsylvania, and New York.

We testified before Rep. Dingell and the only other committee member there was Rep. McCloskey from California. The statements all basically related to H.R. 14527, the amendments to the Wildlife Coordination Act, which among other things bring the Corps, the SCS, and the TVA under the Act. Needless to say, they'd already testified in opposition to this Act.

It seems rather odd that every congressman and senator comes from a state, but when they go to Washington, they get funny like the rest of the 'feds' in there. And they go warn us that it's going to be hard to get through, why I don't know.

McCloskey questioned me on the open-endedness, and Earle started to apologize and say we'd amend it, and I said, well, as politely as I could, "No, it's not open-ended, the way you feds operate is you authorize something and there's no money in it and then the agency has to come back with a line budget of what they're going to spend." There's provisions, you know, to pay the states for the work we've been doing all these years. There's some good aspects to this bill.

Our governor has written, and 25 governors have written in; I would recommend that you guys have your governors write in, and the directors too. It'll be a help. We'll have a little better ring in their nose when we get done with it. That's all I have, Dave.

VESALL, MINNESOTA: That was a well-organized approach as far as the testimony is concerned. If you're going to contact your congressman, you can't do it too soon. They're going ahead with the mark-up on this bill.

THREINEN, WISCONSIN: Which bill is in the forefront as far as this group is concerned, the Blatnik version or what?

VESALL: The Blatnik one.

THREINEN: We should make it clear that the resolution coming along here--

PRIEWERT: It's clear in there. I think it's H.R. 14527.

THREINEN: There's a resolution coming from the resolution committee which will indicate support of this bill.

PRIEWERT: A personal note or a phone call carries more weight than a resolution.

KLEPINGER: OK. If nobody else has anything on this particular subject, we'll move ahead. I think it would be a little ludicrous for me to elaborate on any of these bills; I'm sure that most of you know as much about them as I do, and are aware of their importance, and the areas where the International is supporting and where the International is opposing certain bills, and that is spelled out in this summary.

I think it's important, as Fred points out, to send a personal note; as much personal contact as possible on these varied pieces of legislation is much more important than resolutions.

There's one other area that I would like to deal with today, and that's the need for some type of interstate exchange of information on state legislation. I think we have a good method of keeping up with national legislation, but so often one state's legislature takes action in a certain area and perhaps the adjoining state or some other state that may be interested in a similar type of legislation is not aware of it.

In Wisconsin in this past session of the legislature, we had several very controversial pieces of legislation introduced, which could have been, we felt, very damaging to the resources, and to the resource program in Wisconsin. For example, we had a specific, anti-leg-hold trap bill in Wisconsin. We had a complete protection of the otter bill. We had several other similar types of legislation that, I'm sure, many states were not aware of. How we fared in this and how Wisconsin dealt with it before the legislature might be very helpful to other states if it comes up in your state. And I think the same is true from our standpoint.

So, Mr. Chairman, I would like to suggest that somehow we develop, and I'm not prepared to make a suggestion on how we do this, but somehow we develop a method of exchange of information along these lines. I think Wisconsin could be quite helpful, as an example, in explaining how we managed to get our license increases through, which I'm sure many of you are faced with.

With that I'll conclude the report for Mr. Voigt.

PRES. HERBST: Are there any questions for the Legislative Committee?

GALE, MISSOURI: I was just going to point out that our President, Mr. Herbst, is Chairman of the International Legislative Committee. He's set up a procedure to assemble legislation from various states. I don't know where that stands. I'm sure it's a tremendous task to assimilate all that is under way.

PRES. HERBST: Let me comment then, not as president now, but as Chairman of the International Legislative Committee. We have met several times and, as you know, we have put out a rather complete summary of all the bills that are before congress. What we have done with our committee this year is to designate an individual director or representative of the International to follow each and every bill in congress, and to be our advisor on that bill, and to be available for testimony and to call on others for testimony.

We will have a complete status report ready for the International this September; we are in the process of gathering legislative matters, both good and bad, from the respective states, and we will be compiling a summary of this as a guideline to the states on kinds of legislation that you may be interested in. We try to pick out ones that are unique or different that other states can use. We try to point out trends and problems that some states are now facing that others may later face. We will have this available in September.

Dave Vesall serves as the secretary for the Legislative Committee. We will be meeting with Paul Lenzini and John Gottschalk in Washington on the 30th and 31st of this month. Do you want to add anything, Dave?

VESALL, MINNESOTA: I'd only like to add that the response from the states on the state legislation has been good, as of now. And the suggestion made here about the Midwest to consider this--well, maybe we have to do it on a regional basis. We got the idea and the ball rolling on this.

PRES. HERBST: So I guess what we would say is that we would put a plug in--if you haven't read your mail on this, we would appreciate you sending us some information. It's not necessary to send us a complete bill, but if you do a legislative summary, a brief synopsis, this gives us the chance to review it, and we can always get back to you for further information.

WETTERSTEN, KANSAS: When did this--when was this mailing, Dave?

VESALL: It was right after the North American conference.

PRES. HERBST: Maybe we ought to send a reminder out. Are there any further questions? If not, we'll proceed then to Carl Noren of the National Coordinating Committee.

NOREN, MISSOURI: The report of the National Coordinating Committee activities is rather lengthy, and it's necessarily so because it's been a

busy effort. The National Coordinating Committee grew out of a series of meetings, starting with a meeting of a steering committee which was formed in 1970. The seven-man steering committee, working with the Bureau of Sport Fisheries and Wildlife, was made up of representatives from a number of national citizen organizations and state conservation agencies. With stimulus from the steering committee, there was undertaken an appraisal of the water resource problem. The appraisal was made by the 50 states in cooperation with the Bureau of Sport Fisheries and Wildlife and citizen organizations. The result was the "Action Report of 1971," which contained a wide range of recommendations. Efforts since have been directed to implementation of these recommendations and updating them to meet new problems.

The NCC met in Montgomery, Ala., in November of 1973 to lay out the course for 1974. The meeting was preceded by a meeting of NCC staff members in Washington, D. C., to review previous activities and to make program recommendations.

I'll touch on some of the major items which were given attention in 1974.

Membership.

A three-year system of rotating membership for the International and the regional associations was implemented. The full NCC is made up of representatives from four regional associations, the International Association, the Izaak Walton League, the Wildlife Management Institute, the Sport Fishing Institute, the National Wildlife Federation, and two Fish and Wildlife Service designees.

To get wide involvement while maintaining experience, the association memberships will be of staggered three-year terms, with members unable to succeed themselves.

Dick Wettersten will begin a three-year term in 1975 for the Association of Midwest Fish and Wildlife Commissioners. Other members are: Ray Arnett (California); Dan Cantner (West Virginia); Charles Kelley (Alabama); Pete Barrows (Colorado); Dan Poole, Dick Stroud, Tom Kimball and Ray Hubley (citizens' groups); Ken Black (now in Atlanta); Jerry Stegman (the Bureau). Ray Hubley has recently moved to the Department of Commerce, so there's going to have to be some adjustment made on that part of the membership.

Fish and Wildlife Coordination Act Amendments.

Developing amendments and organizing a drive to amend the Wildlife Coordination Act was a major effort. It included making our needs known, working with sponsors, informing the fish and wildlife interests and the public; soliciting support of key people including the governors, and arranging for testimony before Rep. Dingell's committee. In early July, I testified as Chairman of the NCC before Congressman John Dingell's Subcommittee on Fisheries, Wildlife Conservation and the Environment as to the amendment needs as we viewed them.

This has been a highly successful effort to date. Rep. Dingell has had letters now from 26 governors supporting amendment of the Act. Rep. Dingell was highly complimentary that so many state directors and other state representatives were present, as well as Secretary Nat Reed and Director Lynn Greenwalt. (A list of witnesses is at the end of this report.)

However, this is not the end of the effort. Dingell's committee is friendly and likely favorable, but there will be opposition beyond it.

Habitat Evaluation System Development.

Recommendation 73-1 of the NCC is that the "Bureau of Sport Fisheries and Wildlife move promptly to refine, establish and implement a system of habitat evaluation based on non-monetary measures of habitat values." This need became apparent if we were going to best represent our interests in water resource project evaluations under the new principles and standards of the Water Resources Council.

To accomplish the goal:

1. The Bureau of Sport Fisheries and Wildlife moved promptly by assembling a work group of B.S.F.&W., state agency and conservation organization personnel for a three-week stint in Washington, D.C., during January, 1974, to develop a proposed system. Working on the group were: Roy Corning, Virginia Fish and Game Commission; Ed Glaser and Clarence Daniel, Missouri Department of Conservation; Bob Stein, Oregon Wildlife Commission; Bob Martin, Sport Fishing Institute; Keith Harmon, North Dakota Wildlife Management Institute; Gary Hickman who served as chairman (Fish and Wildlife Service, Washington, D.C.); Fish and Wildlife Service River Basin Office representatives Ed Bradley, Raleigh, N.C.; Jerry Johnson, Kansas City, Mo.; Bruce Klein, Rock Island, Ill.; Donald Welch, Phoenix, Ariz.; Jim Teeter, Portland, Ore.; and Wayne Weier from the Refuge Division in Lostwood, N.D.

2. In March, 1974, the work group conducted a follow-up field test on the Onaga project--Vermillion River (near Manhattan, Kans.), with much help from the Kansas Wildlife and Fisheries personnel. Maps and basic data were supplied by the Kansas City Corps of Engineers District. Coordination was by the Kansas City Office of the Fish and Wildlife Service. The effort since then has been aimed at refining a report in line with the requirements of the new principles and standards.

3. Regional meetings for the conservation agency, states and federal interests are to be scheduled for later this summer to explain the proposed habitat evaluation system. Shortcomings should become obvious then so they can be corrected.

This is an important and timely effort. As experts in the fish and wildlife field, we, not the construction agencies, should be proposing well-based and acceptable methods for measuring water project impacts on those resources.

Other Major Efforts.

1. Recommendation 73-8 of the NCC addressed itself to dredge and spoil disposal. Nationwide interest is obvious because of problems created by dredge and spoil operations. The environmental impact statement process, federal law, and permit requirements enter into the picture. Several special studies of the problem are being started, such as the one in the Upper Mississippi Basin being guided by the Basin Commission. Litigation too has entered the picture. The outcome should be new knowledge, changed operational methods, and a plus for fish and wildlife.

2. Recommendation 73-12 pertains to implementation of the new principles and standards. As NCC chairman, I wrote Roy L. Ash, Director, Office of Management and Budget, and Vice President Gerald R. Ford encouraging the adoption of a realistic project evaluation discount rate and implementation of a policy that would have project beneficiaries pay an equitable share of project costs.

3. Recommendations, even when achieved, can create problems. This was the case with P.L. 89-72, the Federal Water Projects Recreation Act, which was amended to bring the non-federal cost share to 25 percent on fish and wildlife enhancement features. The NCC has provided the Fish and Wildlife Service with an evaluation of the Chief of Engineers' Office proposal for interpreting the change as it appeared in the Omnibus Rivers and Harbors Act of 1974. The unresolved question is should the change apply to fish and wildlife habitat features alone or should it also apply to facilities for their use?

4. Recommendations in the original Action Report addressed itself to the matter of research, especially as related to water resources. There has been progress in this area. Fish and Wildlife Service funding levels are rapidly moving upward. More emphasis is being placed on water project type studies (both before and after the fact). This effort alone should give us much better tools for carrying out our responsibilities.

While this has been a busy and, I believe, a productive year, much remains to be done. The support to amend the Coordination Act should be continued at appropriate stages in the legislative process. And the many phases of the Action Report that need implementation are deserving of your continued support.

My thanks to all of you for your fine cooperation, and to the Coordinating Committee for its good work. Thank you.

Witness List: July 11, 1974 hearings on bills to amend the Fish and Wildlife Coordination Act.

Rep. John Blatnik (D-MN)

Nathaniel Reed, Assistant Secretary for Fish, Wildlife and Parks

Dave Wallace, Associate Administrator for Marine Resources, Dept. of Commerce

Steffen Plehn, Acting Staff Director, Council on Environmental Quality
Dr. O. Earle Frye, Jr., President, IAGFCC, and Director, Florida Dept.
of Natural Resources

Carl R. Noren, Director, Missouri Dept. of Conservation, and Chairman,
NCC Committee on the Action Report

G. Ray Arnett, Director, California Dept. of Fish and Game

Jack A. Crockford, Director, Georgia Game and Fish Division

Robert A. Jantzen, Director, Arizona Game and Fish Division

Fred A. Priewert, Director, Iowa Conservation Commission

Roy H. Anderson, Assistant Director, Tennessee Wildlife Resources

Archie Hooper, Assistant Director, Alabama Division of Game and Fish

Fred Johnson, Water Resource Coordinator, Pennsylvania Fish Commission

Leland M. Queal, Chief, Game Division, Kansas Forestry, Fish and Game
Commission

David Vesall, Assistant Director, Division of Game and Fish, Minnesota
Dept. of Natural Resources

Anthony Taormina, Regional Supervisor, New York Dept. of Environmental
Conservation

Martin Convisser, Director of the Office of Environmental Affairs, Office
of the Secretary of Transportation

PRES. HERBST: I think we ought to give Carl and his committee a hand
for what I think is an excellent job.

* * *

Reconvened Wednesday a.m. Session

VICE PRES. HARRIS: We'll proceed with the meeting. The next item on
the agenda is the Resolutions Committee. I know it's been working very hard,
particularly the chairman, night and day since he got here, so we'll call on
Arnold Mitchell from Kentucky to give the resolutions.

MITCHELL, KENTUCKY: Thank you, Chuck. The Resolutions Committee met on
Monday night at about 9:30 p.m. and went on until about 12 o'clock, at which
time we reviewed some 19 resolutions, of which we endorsed or approved 18
which we plan to present at this time. Copies of these resolutions have been
passed out. I probably will read the short ones and summarize the long ones
for the sake of time. We'll go through them all, and the ones you may not be
in agreement with or you object to, we'll lay aside and take care of those
later, and the ones that you have no objection to, we'll vote on all at one
time.

(See Appendix for complete revised text of resolutions.)

Resolution #1 pertains to the introduction of the timber wolf into the State of Michigan. What this resolution does is more or less commend those individuals who were involved in this experimental introduction of the timber wolf into the State of Michigan.

Is there any discussion of this resolution?

We'll go on to Resolution #2. This pertains to the funding of annual production of lake trout at the Jordan River Fish Hatchery. This is in regards to the fiscal year '75, the Administration budget request for the Bureau of Sport Fisheries and Wildlife, which is needed to maintain a 4.6 million annual lake trout production. This budget was cut by \$100,000. This Resolution urges the United States Congress to appropriate the full amount of \$283,700 needed to maintain the 4.6 million lake trout hatchery. Any discussion?

UNIDENTIFIED VOICE: The '75 budget request is already passed, so aren't we talking about something....

MITCHELL: This was in the fiscal year 1975 administrative budget.

VOICE: But what we're talking about, though, is the budget for 1976.

MITCHELL: This budget hasn't passed, I believe. Any other questions?

If not, we'll go on to Resolution #3. This pertains to the inadequate surveys on which the BOR plan is based. It's fairly important. Any questions?

KLEPINGER, WISCONSIN: What were the three months on which the data was based?

MITCHELL: June, July and August I believe.

We'll go on to Resolution #4. This is in support of H.R. 14527, the amendments to the Fish and Wildlife Coordination Act. I think we're all familiar with this; there was discussion here this morning concerning the hearings in Washington. I'll just read the last part:

"....The Association of Midwest Fish and Wildlife Commissioners...supports the passage of H.R. 14527 since it encompasses the most important changes necessary to insure preservation of fish and wildlife values associated with federal projects and federal licensing activities..."

Any questions on Resolution #4? Well, we'll go on.

Resolution #5 pertains to low altitude waivers to allow low level flying for fish and wildlife operations. Evidently, this has a serious affect on census work, the waterfowl census in some states, because of the restrictions on low level flying and the FAA's refusal to give low altitude waivers or to change the waivers.

We ask the IAFGC to petition the FAA to show specific evidence and cases of "dangerous flight operations and breaches of safe aerial procedures of fish and game operations under 500 feet, and show cause why certain states have had their low altitude waivers cancelled, rescinded, or changed," and if they can't, to reinstate all waivers immediately. We ask that cases be handled individually too.

Any questions?

STUART, NORTH DAKOTA: I'm curious about this because they denied our request for a waiver, and they indicated that as long as the state has issued a low-flying waiver, they didn't feel it was necessary to grant the federal waiver. But according to our pilots this is no particular problem, they still fly 150 feet or so. The Bureau does a lot of flying. Anybody here from the Bureau?

MITCHELL: Anybody here can answer that?

UNIDENTIFIED VOICE: I had a discussion with Ross Hanson, our regional pilot, before I came up here, and Ross is in favor of low level flight. They do stay away from people and buildings, but there are times it is necessary to count waterfowl.

STUART: Yes, I know you're in favor of it, but I'm saying, do you run into any problems?

UNIDENTIFIED VOICE: The regional office is running into problems.

VESALL, MINNESOTA: It is a problem in Minnesota. We're still flying, but our pilots of course are sticking their necks out and it could be reported as a violation and the pilot would be subject to losing his license. I know that Ross Hanson and the federal people feel it's a problem too. I would support a change in that. The International Association is working on this.

MITCHELL: This isn't a problem in my state, or at least it hasn't been a problem. Any other discussion on this? Do you want to set it aside? I think it's a good resolution.

We'll go on to Resolution #6, the redesign of harvesting equipment to reduce wildlife losses. This is a short one.

We say that game birds, especially pheasants, suffer extreme mortality from agricultural harvesting equipment, and our management techniques cannot compete with these tremendous losses. We ask wildlife organizations and shooting arms manufacturers and sportsmen to cooperate with the harvest machinery manufacturers in redesigning the equipment.

WETTERSTEN, KANSAS: Just a question. Is this coming from the Pheasant Council or who?

MITCHELL: I'm not sure where this one came from. I assume it did, but I

have no idea of the source. Do you know, Chuck? I think that prior to our meeting, I'd only seen five resolutions, and they all started bringint these out of their hip pockets at the committee meeting the other night.

Are there any objections to this resolution? Any comments? We'll go on to Resolution #7. This is management of the Lake Erie commercial fisheries by a quota system. This is something new to me. We discussed this the other night a little bit.

We are commending Ohio for its recent adoption of a bill which empowers the state to manage its Lake Erie commercial fisheries by a quota system, and we are suggesting that other state governments take a look at this and consider similar legislation. Are there any comments?

UNIDENTIFIED VOICE: Yes. I've no basic argument with your resolution and I think Ohio has milestone legislation here, but "quota system" alone is not completely descriptive, I don't think. I mean, they have a combination of limited entry plus quota there. I don't remember the exact words, but "quota system" per se may not be perfection alone, one might be searching for quota management of fishery. I just raise that question.

MITCHELL: Dale Haney from Ohio, do you want to comment?

HANEY, OHIO: Senate Bill 532 does provide for a quota system and a limited entry, however, it has the quota control on boats and the limited entry could be a big factor.

VOICE: In describing it, though, would you want to say "a limited entry and quota"? I think for general purposes of understanding it, it would be better.

MITCHELL: So you want to insert in here a limited entry and a quota? Does this meet with approval? Let me write this down.

We'll go on to Resolution #8. This is a memorial to A. Gene Gazlay.

UNIDENTIFIED VOICE: Pardon me. John Popowski and others had something that I think should be considered, that number 8 be moved to number 1. I mean---

MITCHELL: The reason for this, I think, is that I had gotten up to about five that I had received, and this one was one. We discussed the order at the committee meeting. I'd be glad to make this change.

Well, Resolution #9 is a resolution that pertains to our opposition to anti-leg-hold trap legislation. It's pretty lengthy. I think this was discussed here this morning and possibly yesterday. This is an important resolution, the committee felt. I know in my own state of Kentucky we had a bill in the legislature this year to prohibit the use of the leg-hold trap, which we forced them to kill in committee. Are there any comments on this?

UNIDENTIFIED VOICE: Mr. Chairman, our second "resolved" there, we have "steel-jaw trap," and it should be consistent with the previous "resolved" section which says "leg-hold" trap.

MITCHELL: Well, we changed it one place, then, and to be consistent...

VOICE: We were getting a little sleepy by then...

MITCHELL: OK. Resolution #10, the appointment of state and national advisory boards by the Secretary of Agriculture.

We say that the Secretary of Agriculture should act promptly to appoint advisory boards as provided for in Title X of the Agricultural and Consumer Protection Act of 1973. Some of the state boards haven't been appointed either. They've been dragging their feet on this, and I think this is an appropriate resolution. Any comment?

BARBEE, NEBRASKA: I believe that some state boards have been appointed. I don't know how many. We may want to soften this up, just a little bit, to indicate that.

MITCHELL: What's your pleasure in this regard? Do you think we should soften it a little bit?

UNIDENTIFIED VOICE: I think you're referring to some of the state boards. Some of the state boards have been appointed and some of them haven't. But the national board has not been appointed. We could change it to say "whereas some state advisory boards". That would really clarify it.

MITCHELL: So we add the word "some" in there. So it reads: Whereas, one such measure is the appointment of some state and national boards.

UNIDENTIFIED VOICE: Mr. Chairman, that seems to imply that some national boards have been appointed.

(Discussion of wording by unidentified voices)

MITCHELL: Ok. "Whereas, the National Advisory Board and some State Advisory Boards have not been appointed..."

Any more comments on this resolution? Any questions?

We'll go to Resolution #11, concern for soil erosion. We ask the USDA to establish on-land studies "to document the past and projected impacts of modern agricultural practices upon the Midwest's soil and water resources.... and to adopt more stringent measures to protect the soil from erosion and to prevent soil pollutants from entering public waters." Any questions?

UNIDENTIFIED VOICE: I wonder if, after fish and wildlife habitat, we wouldn't want to add a point saying "and spoiling of recreational waters" to broaden the resolution.

MITCHELL: Right after "habitat"?

VOICE: Yes.

MITCHELL: OK. Any other comments?

VOICE: Another question I'd like to raise. We heard a talk on the Soil Conservation Service yesterday, and the indications were that there are a number of practices that do work and have evidently been rather comprehensively researched. They have prospects of substantially reducing soil erosion, and we're asking for more research here. The question I raise, is there enough research in progress?

MITCHELL: Oh, you mean you think there's enough research already?

NELSON, MINNESOTA: My experience with the SCS is that it does not have documentation of past erosion or current erosion, or what we can expect in the next decade or hereafter. And what we had in mind here was asking them to provide documentation of what is the current pattern of erosion doing to the national resource of the soil. Where are we going from here? Not a detailed research study of particular practices. Monitoring the soil.

MITCHELL: I suppose we leave it then as is. Any other questions on Resolution #11?

Let's go to Resolution #12. This pertains to the Garrison Diversion Irrigation Project and Wetland Mitigation. We say that the Bureau of Reclamation should "redesign the wetland mitigation areas based on a more accurate inventory of the wetland losses and on scientific waterfowl production data," since their original study is outdated and insufficient.

(Discussion of wording and of recipients of the resolution.)

OK. Thank you. Let's go to Resolution #13, Request to Expand and Extend the Small Wetland Program Beyond 1976. The Fish and Wildlife Service's small wetland acquisition program is due to expire in 1976, and we are asking that it be continued.

Any comments on Resolution #13? OK.

We'll go to Resolution #14. This is in regards to the right of citizens to keep and bear firearms. This is a subject that I think we're all familiar with. We are endorsing that right, approving hunter safety and firearms safety education programs, and pointing out that firearms have many legitimate uses.

UNIDENTIFIED VOICE: I think it's very good. I wonder if you might want to consider another clause in here to cover the subject of registration of firearms.

MITCHELL: What do you want to insert in here?

VOICE: "Keep and use guns without registration."

MITCHELL: "Keep and use without registration all legal firearms"?

(Discussion of wording.)

BOUSHELLE, MICHIGAN: Has there been any consideration by the committee or the body to have copies of this resolution sent to the governors and the state legislatures?

MITCHELL: It wasn't discussed the other night in our meeting but I see no reason why it cannot be.

UNIDENTIFIED VOICE: I think we can probably handle that in the motion to adopt the resolution. We can direct the president to mail these copies to the appropriate parties.

MITCHELL: OK. We're going to strike out the word "unanimously" and then put a "Be it further resolved" about registration.

We'll go to Resolution #15, commending the Izaak Walton League of America.

UNIDENTIFIED VOICE: I'd like to point out, Arnold, that this comments the League for its "Save a Stream" program. That's the specific thing.

MITCHELL: Right. Their program stimulates action and interest in protecting streams against threats such as channelization or dredging or pollution. Any comments on this resolution?

We'll go to Resolution #16. This is in regard to seeking studies and clearance of candidate fish toxicants. We ask that the U.S. Fish and Wildlife Service begin "a concentrated, immediate series of field tests...toward clearance of the candidate chemicals with the Environmental Protection Agency." We're talking about toxicants, including a specific carpicide, that have been laboratory-tested by the Bureau of Sport Fisheries and Wildlife which show "potential promise to either reduce the mortality of non-target fishes or to eliminate fishes presently invulnerable while the chemical degrades into harmless components."

Any questions regarding this one?

UNIDENTIFIED VOICE: In the second "whereas," the last line of the paragraph, I think the word "of" after "criticism" should be replaced by "by".

MITCHELL: "...using chemical control measures to criticism by environmentalists"? Any other comments.

UNIDENTIFIED VOICE: You've got both the U.S. Fish and Wildlife Service and the Bureau there.

UNIDENTIFIED VOICE: I think the first reference to the Bureau is correct, because the work was done under it at that time. But the second one, in "Now therefore be it resolved," that reference should be changed to the Fish and Wildlife Service. Actually, the earlier reference was to the Bureau as such.

MITCHELL: OK, we'll change that. Any other comments?

We'll go to Resolution #17. This one is in support of a proposed amendment to Public Law 89-304, the Anadromous Fish Act. We're supporting this bill that would liberalize the funding from 50 percent to 75 percent for single state projects and 60 to 80 percent for a multi-state project; and the bill would increase the funding too.

Any questions or comments on this one?

UNIDENTIFIED VOICE: I think there was a (unintelligible) resolution last year on this same subject, and I wonder if there ought not to be a reference to that.

MITCHELL: Well, then, maybe we should put a reference to the one made last year. That could be inserted in the first "whereas."

VOICE: Or in the "resolved," we might want to say "reaffirmed its support" instead of "herewith makes known."

MITCHELL: OK. That should be "reaffirmed its support." Any other comments?

Well, we'll go to Resolution #18, which is Appreciation for Minnesota's Hospitality and Excellent Program. I'm sure there's no objection to that one.

VICE PRES. HARRIS: You've heard the resolutions, then, and the chair is ready for a motion to adopt the resolutions as read and changed.

STUART, NORTH DAKOTA: So moved.

NOREN, MISSOURI: Second.

VICE PRES. HARRIS: Any discussion?

UNIDENTIFIED VOICE: I would like to discuss the resolutions a little bit. We should direct the incoming president to send these resolutions to the appropriate agencies and whatever.

VICE PRES. HARRIS: I don't think the incoming president takes office until the first of January, so would it be the incoming president or the current one?

VOICE: It would be the current president. This has to be taken care of as soon as possible.

VICE PRES. HARRIS: Also, I think, the chairman of the Resolutions Committee for the International has requested that the various associations send him the resolutions that they adopt at their regional meetings immediately. That'll be part of the motion. It's been moved and seconded that the resolutions be approved, and that the president be directed to send these to the appropriate governmental agencies and officials, as well as to the chairman of the Resolutions Committee for the International. All those in favor of the motion please signify by saying aye? Opposed?

Motion carries. I want to commend you, Arnold, for a job well done.

UNIDENTIFIED VOICE: Mr. Chairman? I would like to clarify something that was brought up this morning in talking about proposed legislation. Larry Gale pointed out that Commissioner Herbst is chairman of the Legislation Committee for the International and had already asked for state cooperation. But actually we had asked for this information on unique state legislation only from the members of the Resolutions Committee.

(Acting Chairman Harris adjourned the meeting.)

Third General Session - Thursday, July 18, a.m.

VICE PRES. HARRIS: We are very fortunate to have with us this morning Lynn Greenwalt who, I am sure, is no stranger to any of you. Lynn is the director of an old agency by a new name, formerly the Bureau of Sport Fisheries and Wildlife, and now the U.S. Fish and Wildlife Service. Without further ado, I'll give you Lynn Greenwalt.

PLANS AND PROGRAMS OF THE U.S. FISH AND WILDLIFE SERVICE

by

Lynn Greenwalt, Director
U.S. Fish and Wildlife Service

Thank you very much. If I seem a little confused at the outset, it's because I've been around a little in the last few days and, according to the note my secretary very meticulously made for me, this is Thursday--therefore, it must be Duluth. Yesterday it was Colorado Springs and the day before that it was Albuquerque. Let me say that no amount of difficulty could really prevent me from getting here to join the Midwest Association in talking about some things that the Fish and Wildlife Service has done and our plans for the future. As I say, I'm beginning to grasp reality again, and it's Thursday, it's Duluth, and I'm delighted to be here.

Now, to talk a little bit about some things at the outset that I know you'll be interested in because your folks in the Western Association were interested in the same things. It's always psychologically desirable, I'm told, to give you the positive things first, and I think most of the things I'm going to talk about are positive.

Many of you have been familiar, at least in a superficial way, with the suit that the Secretary (of the Interior) faced in connection with the hunting program at the Great Swamp Refuge in New Jersey and two other wildlife refuges on the East Coast. Early this month the appeals court upheld the decision of the lower court which means, to say it in a word, that the United States "won"; that hunters and hunting in the context of that case "won."

It has some interesting implications, I'm sure, for all of us. I'd like to paraphrase a line or two from the decision: The court reaffirmed the conviction that hunting is a socially acceptable and proper activity on public lands in the United States, and that the humaneness of the issue has no bearing on the matter because the laws are silent on the humaneness of the issue; that in the three cases coming before the court the Secretary did not act arbitrarily or capriciously and was, in fact, discharging his responsibilities, carrying out, or attempting to carry out, a program in a professional manner.

The concept of hunting was endorsed by the appeals court. It's not a case of establishing a precedent so much as it is reaffirming what everybody

assumes to be fair. That particular decision is important to all of us interested in hunting and its ramifications, but I suggest to you that it might not be the end of similar challenges.

Now, the other matter in which you will be keenly interested concerns the long-awaited EIS and proposals regarding the use of nontoxic shot in waterfowl hunting. I feel almost bureaucratically embarrassed talking about an EIS that has at long last appeared, will be appearing today, perhaps. (I understand it was in the print shop last night or the night before.) The EIS discussing the proposal for the use of nontoxic shot in waterfowl hunting will be made available to you immediately.

Now, it's important to understand just what the Environmental Impact Statement is and what the proposals contained therein really are. The Impact Statement, as most of you know, is a document that treats the proposed and various alternatives in great detail, including all the background information germane to the making of the proposal. But the part you're interested in is the proposal, and the proposal is succinctly this: the use of nontoxic shot (and for all practical purposes at this point that seems to be soft steel) will be controlled by regulations; regulations will ban the use of lead shot in the Atlantic Flyway for the hunting season commencing in 1976, in the states of the Mississippi Flyway with the hunting season commencing in 1977, and in the states of the Central and Pacific Flyways commencing in 1978. In the latter two flyways, the Central Flyway and the Pacific Flyway, the regulations may be limited to specifically designated areas, hot spots where the Fish and Wildlife Service and the states of these flyways determine that lead poisoning is a serious problem.

Now, the Environmental Impact Statement which you will be receiving is a draft one. It's out for review and comment. All of the proposals are to be commented upon; and if you have questions or comments or disagreements or alternative ideas, this is the time to make them known. After the EIS has been out for review and comment, it will be redrafted and rewritten; and, as you know, the National Environmental Policy Act requires that we respond in detail to all substantive comments. This makes it possible for all the interests, whether representing an individual citizen or a group of sportsmen or a state game department or whatever, to comment and contribute to the content of the EIS and the proposals derived from it.

We're talking about nontoxic shot, while recognizing specifically that any acceptable nontoxic shot which will do the job can qualify in lieu of steel. To put it in simpler terms, if somebody comes up with something better than soft steel, the regulations could accommodate that very readily. The qualification is that it must be nontoxic.

I might say that in addition to having the Environmental Impact Statement in your hands as quickly as we and the U.S. Mail can bring this about, we also have a few copies of a news release which will be sent out as soon as the EIS is out for public consumption.

Perhaps the best way to begin a general report on the Fish and Wildlife Service, its plans and aspirations, is to talk a little bit about where we stand. The name change that was effective the first of July is a small matter to everybody except sign painters and uniform makers and folks who print letterhead--but not a small matter to the people who work for the U.S. Fish and Wildlife Service. It has been a great morale booster for all of us to once again be called the U.S. Fish and Wildlife Service.

One of the things that makes the Fish and Wildlife Service a pleasant place to be these days is that we have been recognized once again in the budget circles--which is always comforting. The 1975 budget for the Fish and Wildlife Service and, as a matter of fact, for most of the government, has not been completely cleared through both Houses quite yet, but our understanding is that there will be substantial increases for the Fish and Wildlife Service and at least a part of these will be directed to several problems in which you have an interest.

One of them is the matter of the fish food price increase. Mrs. Hanson, who is Chairwoman of the House Appropriations Subcommittee, is keenly interested in problems that are basically economic: why fish food costs more now than it used to, and what does this mean in terms of fish production throughout the United States. It's our understanding that there have been significant funds added to our appropriation to cover the cost of the fish food.

There has been keen interest in the halls of Congress, as you can imagine, in the predator control program (or the lack thereof, depending on your point of view). As you know, the Fish and Wildlife Service continues to accept its responsibility with respect to the 1931 law. We are also interested in joining in cooperative arrangements with states to enable states to become more fully involved in predator control. State directors in the West have unanimously agreed that the control of predators, coyotes in particular, is the kind of thing the states feel they must do, because after all the predators are resident species--but the states need help and they need support and we'd like to be supplying both, particularly in terms of cooperative agreements permitting the United States to contribute funds and technical assistance to them. This has many complications, I recognize, but it's an idea that's now well accepted and enthusiastically received, particularly by several of the western states where this is a critical problem.

This example serves to underscore what all of us in Washington in the Fish and Wildlife Service feel very strongly about, and that is the state-federal relationship. You're aware of our negotiations with many states to accept the management of fish hatcheries that are of potential interest or importance to state programs. We are attempting to use the Intergovernmental Personnel Act as much as we can to share special employee talents. We are interested in continuing the relationship that my predecessor Spenser Smith initiated, and to which I'm committed not only to continue but to reinforce.

One thing that we are particularly concerned with at the Fish and Wildlife Service is Secretary Morton's admonition that we should more fully exploit the things we know rather than the things we do. As steward of a

good deal of natural resources, he's concerned about the problems that are surely to arise as the nation begins to exploit the energy reserves in the public lands--the whole spectrum of things that will come about as a result of the President's decision that we will be self-sufficient in energy in a decade, or whatever.

The Secretary is concerned about the urgency to exploit energy outstripping environmental considerations. He has people who are committed to getting oil in an oil pipeline as rapidly as possible, and at the same time he must have people who are committed to looking at the environmental consequences. The Secretary has challenged the Fish and Wildlife Service to provide the kinds of information that he and other decision-makers must have to make sure that the right decisions are made about developmental and exploitive activities in the United States. And obviously these are going to be major things, potentially very serious things.

Beginning right away, we have a sharp increase in the budget for Biological Services, which is basically elaboration on the kinds of things we've done for years, determining what's likely to happen if this-and-such kind of development is undertaken. We try to do that in a thoroughly professional manner, in concert with the states and with universities and with anyone else who has the information which ought to be in the hands of people who decide these critical issues.

This is frankly one of the ways we think the federal government can best protect the resources with which we're all concerned.

But it does not mean that we're going to give up the traditional responsibilities of the federal government. For example, contrary to what you may have heard, it is not the intention of the Fish and Wildlife Service to give up enforcing the migratory bird laws. We still intend to discharge this responsibility as well as we can, given the limited number of staff we've always had, just as we've done in the past, in cooperation with the states.

In my judgement, there ought to be very little change, if any, and that on the positive side in support from United States Special Agents (formerly Game Management Agents) for enforcement of the migratory bird regulations, our particular interest at present. There is a great need for investigations of major wildlife and fish law violations, and conspiracies to improperly utilize the resource--the kind of thing you read about in the newspapers, and you read only a small part of what really goes on. Be that as it may, it is not our intention to abrogate in any way our responsibility to help, and as far as we can, enforce the migratory bird laws.

We have revamped the organization of law enforcement for a number of reasons, and while it's confusing I am sure to those on the outside--and some days it's a little confusing to those on the inside--I think it's going to work well. It will help us be more responsive not only to the major things, Lacey Act type violations, that we're concerned with, but also will help you when there are problems that need our assistance and we are here to help.

We also are still committed to the management of Fish and Wildlife Service lands, the National Wildlife Refuge system. We're not walking away from that responsibility.

Like you, we don't have as many dollars (or dollars that are worth as much as they once were) to do this kind of thing, but we intend to stay in that business. We intend to stay in the business that has been traditional and mandated by congress for the Fish and Wildlife Service.

You're aware that we are looking, as any agency must look, at the things we do and the roles we play in several areas, principally the production of fish. You're aware of the committee work that has been going on for a number of months; the committee is now writing its report, which will help us decide what the federal role really ought to be in fish production.

More importantly, the committee was primarily made up of representatives from the states, and it reflects in large measure what you folks think the state role, the federal role and the private role ought to be in fish production. And it very likely will modify our position in terms of these roles.

I think this is not, and should not be regarded as, a cop-out, but as a practical and important way to do business, particularly since we must reassess our priorities about spending, collectively and as individual agencies. We're going to be doing as much of this as is practical, as much of this as you can help us with in concert with the state agencies. We're all in the same resource business and the last thing we want to do is have duplication of effort, because this may be fundamentally inappropriate and it's certainly a luxury none of us can afford.

There are some things that I should mention to you about what to expect in the future. First of all, it's quite clear that very little federal legislation not already in the mill is likely to get through congress this session. Many of you came East and spoke about the amendments to the Fish and Wildlife Coordination Act, which I am told is very likely to pass the House but probably will not be acted on in the Senate this session. The Senate is likely to be totally and completely preoccupied with impeachment, which means any legislative action will stop for all practical purposes. We have worked for several weeks on the premise that nothing is going to happen in both Houses of Congress until the whole Watergate impeachment affair is over.

I want to re-emphasize another point. In spite of the decision of the appeals court in the East, the anti-hunting movement, the anti-violence movement, whatever you care to call it, is still in action and we can look for continuing challenges to the idea of hunting. We collectively must be very sensitive to these probabilities. I currently live in the East where I can easily encounter every day folks who are bound and determined that hunting is bad and we really ought to stop it, that the little critters ought to look after themselves, and that nature will take her course and everything will be great just like it says in the Disney movies.

I haven't been in the East so long that I've come to believe that, because I know it's not so, but we do have problems with people who are misinformed and basically misguided and who would dearly love to see hunting and its related activities relegated to the history books because they don't like it. It's a continuing problem we should never ignore; it will grow and overcome us if we're not careful.

I should also say that I think the motives of these people are basically fairly sound, that they are not maliciously involved in trying to stop hunting, but they're grossly misinformed. There are many people who for their own purposes would like to stop hunting, but most of the ones I've talked to in the East just don't know what it's all about and they are grossly misinformed. Properly informed, they tend to change their minds about hunting, management and manipulation of populations.

Now, what about land acquisition? We're concerned about the termination of the Wetland Loan Act in 1976. We have for several months been negotiating with the Department and the Office of Management and Budget to determine how to continue the land acquisition program, which as a law will terminate but which is as acutely important to us as it has ever been.

The fundamental question is how do we keep the money coming in to continue an acquisition program? If nothing is done, obviously the wetland loan advance authority will expire, and we will have to begin repaying the advance. There are a number of alternatives we are contemplating, including legislation to extend the wetland loan fund and to increase the authorization. We are also contemplating the forgiveness of the debt, which is common practice in many quarters in federal government. We're contemplating a variety of ways to increase the income for use in land acquisition.

As you may be aware, there are two kinds of acquisition funds that the Fish and Wildlife Service has. First, of course, is the Migratory Bird Hunting Stamp Act revenues; the other is the Land and Water Conservation Fund, which is pretty much limited to certain kinds of recreation lands and lands for endangered species. We're interested in keeping the revenue from the duck stamp so that we can continue an acquisition program. We're going to try diligently and with the support we have in both Houses of Congress, we're likely to be successful.

The endangered species program I think you heard a good deal about earlier from Keith Schreiner. One of the things I'm sure he mentioned is our intent to use the grant provision of that act, assuming we can get funds to support the grants. He may not have told you, but I will, that we are prepared to ask for a supplemental appropriation in the 1975 budget to seek out the grant funds to be used in the grant-in-aid part of the endangered species program. We have reason to believe that this will be a successful effort. The only impediment, frankly, is that the Office of Management and Budget hasn't anything against endangered species, but it does have a fundamental reaction against grant-in-aid programs whatever they may be.

But we are trying to have the full support of the Secretary to get a supplemental appropriation for this fiscal year so that we can begin the grant-in-aid program as soon as cooperative agreements are worked up between ourselves and each of the states in accordance with the Act; with a little luck, I think we'll be able to do some good with it.

One of the things that was mentioned to me in Albuquerque, and I think it was kind of a dual-purpose question, is what are we going to do about taking crows and magpies off the Treaty. Now this seems like a modest enough proposal, and in many quarters it is regarded almost as facetious, but it's a little more serious than that.

As many of you know, the folks in New Mexico have been working for some time with authorities in the Republic of Mexico, and have concluded after discussions with them that the Mexicans would be receptive to amending the Treaty to exclude crows and magpies so that we don't have the difficulty that we now have. Now, one cannot shoot them because they're protected under the Migratory Bird Treaty Act.

As you probably know, the original intent of the folks in the Republic of Mexico was to protect the white-necked raven, or some other creature that's not common. In the attempt to do so, they protected the whole family of corvines, which includes crows and magpies, and now we've got problems.

I have promised the Western Association as I'll promise you, that later on I'll speak to my opposite number in Mexico and we will more formally approach amendment of the Treaty to resolve the knotty problem of crows and magpies. I won't guarantee success, but I will guarantee the effort.

Now, one other, perhaps two other, points that I'd like to talk about. One is basically philosophical in nature, but I would like to share it with you; and I'd like to discuss the matter of migratory bird regulations for the coming year. I think you've been advised that there is at present, so far as I know, no very concrete information on the production assessments in Canada. Lots of water, excellent water conditions in the breeding grounds, but nobody's absolutely certain how many ducks are being produced, although there seems to be an extraordinary production of pintails in some areas. I'm not going to make any prediction about the waterfowl season regulations or the state of grace we'll find ourselves in come early part of next month when we begin to deliberate these matters.

I do want you to know that the Secretary of the Interior is committed to the idea that the sport of waterfowling is acceptable, that it's something we ought to perpetuate. This also means that we ought to perpetuate the resources at a level which will permit a continuation, an indefinite continuation, of the sport of waterfowling. It also means that we're going to have to look long and hard at what it takes to perpetuate this sport and this means cooperation and mutual understanding about waterfowl management, harvest, the "whole works," the likes of which I suspect we have never engaged in in the past.

We will probably not always agree about the minute things about which decisions have to be made. We may have to make drastic changes in regulations in order to perpetuate the waterfowl resource. I think we should pledge to agree at the very beginning that we all want to perpetuate the hunting of waterfowl as a sporting activity in the United States, and that we will protect and perpetuate that resource.

There is another dimension in the field of wildlife management and rational resource management that we're all going to have to face up to, and I have challenged my own staff to begin right now to think about some fundamental things, best exemplified perhaps by the confrontations occurring between wildlife and people.

The classic example, in my judgement, is the conflict of blackbirds and people. The little town of Graceam, Maryland, which is several miles north of where I live in Maryland, is blessed with a blackbird roost all winter long. It was a blessing to the TV people because it gave them a great opportunity to fill the otherwise burdensome void on the boob tube during the last few seconds of every news sequence with what the blackbirds were doing in Graceam, Maryland. I can tell you what they were doing: they were driving those people right up the wall.

One hundred years ago I am sure there was a blackbird population in and around Graceam, Maryland, but nobody really cared because there weren't many people then. Now it's no longer possible simply to chase the blackbirds from Graceam over the hill because there are people on the other side of that hill. We can't accept great concentrations of blackbirds, as an example, as a matter of course, because they're carrying disease in many areas. These kinds of conflicts and confrontations have to be resolved, and we should start resolving these things on our terms rather than on somebody else's terms.

Another example, which may not be quite so obvious but I think is equally germane, is the matter of protecting wild horses and burros. As you're aware, there was an act passed which clearly in a straightforward way provided protection for wild horses and burros but did not provide any outlet. What do you do when you're up to here in wild horses and burros? One day we may very well be literally up to here in wild horses and burros in the West.

Yet no one has contemplated what it is that rational managers should do about this kind of potential conflict. This conflict is developing very clearly with respect to coyotes, that ubiquitous and remarkable animal that does well in spite of what anybody does to it or for it. These conflicts are going to develop and increase, and the challenge on us at the federal and state level is incredible.

The Congressman on the House Appropriations Subcommittee has said if we have somebody from the Fish and Wildlife Service on one side of the microphone and him on the other, we talk about blackbirds regardless of what the legislation at issue may be. He worries about this--there's no doubt about it--he's a very intelligent man and he frequently gets to the heart of the prob-

lem: when are you guys going to quit chasing them from my fields to my neighbor's fields and back again? These are the kinds of fundamental issues we're going to be facing early on.

People are here to stay. We want the critters to be here to stay, too, but we must at all costs make sure they're here to stay on our terms and not somebody else's, because the solutions to problems tend to be overly simplistic and without long-term merit. Wild horse legislation is a very good case in point. There was clear indication that creatures ought to be protected but no provision, no authority, for management in any rational way whatsoever. We cannot endure this sort of solution to problems in the future.

I suggest to you that the Fish and Wildlife Service will take the lead in many of these areas and I suggest that you folks also might do well to think about these problems in your own areas, because they won't go away. They're here to stay.

At the risk of seeming repetitious, I want to say once again that the special interest of the Fish and Wildlife Service is the same special interest you're concerned with--the resource, its use, and its perpetuation for generations to come. I find it profitable for my own well-being to consider that we're all in business for a single purpose, and that is the resource in which we have an interest and I think all of us a personal commitment. I've said to you before, and I say to you again whenever I get the chance, that the job is bigger than any one of us can do alone, and it's probably bigger than we can do collectively. But it's the kind of thing, a responsibility, that we cannot shirk and we should not shirk and, as far as the Fish and Wildlife Service is concerned, we will not shirk.

We will not agree, as I said, on many issues; we will agree wholeheartedly on others; we will have differences of opinion on how we do certain things. I would like to be able to think that all of us, always, share an understanding on one point: that we're in business for the welfare of the resource. I pledge that to you on behalf of the Fish and Wildlife Service.

If you're inclined, I'm certainly prepared to answer questions or to entertain comments from the floor on any of the things I've said--or, more importantly, on any of the things that I haven't said.

WETTERSTEN, KANSAS: I'd like to first express appreciation, Lynn, for the regulations on waterfowl. My main question concerns the evaluation of the waterfowl resource. Is there something that's prompting this reevaluation? Is there a concern that has not been expressed to the state directors over habitat, over shooting, or whatever it might be, that might prompt this study that you implied might be coming up soon?

GREENWALT: No, nothing of that kind. By way of a bit of background, one of the things I have been concerned about for some time, and particularly since I became director, is that there was no well-enunciated national program or set of objectives, or clear-cut definition of what the national

waterfowl management program is, or ought to be. We always seem to skirt around the central issue--what is it we're trying to achieve with management of waterfowl in the United States, and how do we get there once we know what it is we're trying to do. So I've asked a group of our people to put down what we think a national waterfowl management program really ought to be, particularly its objectives. And then, once you know where it is you want to go, it's a little easier to define how to get there.

We are also concerned, and we must be concerned, about a clear understanding and a clear utilization of the tools we have at hand for harvesting and managing, to attain the overall objectives in a national waterfowl management program. There is no Machiavellian scheme afoot; I am not aware of any conflicts or maneuvers that might in some way jeopardize what it is we're trying to do, beyond the feeling of some people that many of our waterfowl management problems could easily be resolved by stopping hunting. There are no problems that I have not shared with you folks.

What we're doing at the federal level is trying to draw a road map that a rather naive director ought to have to look at. One that I think we all ought to have to look at. We've been operating for a great many years with a pretty good system which worked well--we haven't lost all the ducks--but I think we can no longer go by the seat of our pants and make it survive. Because we're not doing it just among ourselves anymore; we're managing waterfowl in a fishbowl where everybody watches and people who disagree are likely to take steps that we can't stand. Once again, the objective is to manage these creatures on our terms, that is, in a professional, rational, biologically-sound sort of way, and not on terms that are superficial or simplistic or expedient.

GOULDEN, WINNIPEG: First of all, Mr. Greenwalt, I'd like to commend you for the position you're taking on management of waterfowl. I would just like to add that we'd be very pleased if you'd consider including in your deliberations the fact that waterfowl transcend the border between Canada and the United States. We would urge you to cooperate both with our federal government and our provincial governments in assessing the situation and developing objectives. The Canadian government is now, at least in the western part of the country, considering the same sort of undertaking as you've recounted, and many of the provinces are grappling with the same kind of problem without a great deal of success, I might add. We're dealing with a resource here which is very, very difficult, it seems, to put your finger on. We would certainly ask that we share in developing programs for both of us together.

GREENWALT: I'm very pleased that you brought this up, because one of the things I did not mention is that we have within the last few months re-instituted the International Migratory Bird Advisory Group, which includes the Canadian government, representatives of the United States government and the Republic of Mexico. The Director General of the Canadian Wildlife Service and I were in Victoria, British Columbia, about three weeks ago, and we confirmed our interest in pursuing precisely what this gentleman alluded to. An international resource, waterfowl, is among other things one that the

Canadian Wildlife Service is concerned with. We do recognize this and I intend to exploit your generosity to the fullest.

PETROSKEY, MICHIGAN: When is this document forthcoming? What's the timetable?

GREENWALT: I'm always impatient about these things, and I had asked that a first draft be put together by the end of this calendar year. What we'll do, of course, is put together a point of departure for everybody to look at. The approach may be entirely wrong, but you've got to start somewhere. Once we've got something put together, I intend to ask all you folks to look at it.

HOOVER, COLORADO: I was interested in your remarks that the anti-hunting advocates have no malicious intent, they're just misinformed. I've heard others say that some of the leaders guiding these people are anti-guns, not anti-hunting, and they hope to achieve their goal by attacking hunting.

GREENWALT: Well, quite clearly they're not going to tell us what their motives are, but there's a whole mixture of attitudes. I know that a great many people are overwhelmed by a curious moral or philosophical relationship with wild creatures, and I think particularly of some individuals who have a great concern about the kangaroos in Australia, which are of no concern whatsoever of ours except for the Endangered Species Act. These folks are convinced that kangaroos are almost gone in Australia, which is not necessarily true, but more importantly, they are absolutely repelled by the idea of shooting these creatures which, to their minds, are like koala bears and the animals that you see in magazine ads proclaiming airlines. They feel there's something morally wrong with the taking of kangaroos.

This seems to be translated in many ways to deer. Some of the staff people call this the "Bambi syndrome." They're leaders' motives I can't fully divine, but I've heard it said by several people that this is a back-door way to disarm the country.

I do know that the opposition is formidable. They have as a common denominator a great deal of time in which to deal with these things; they're extremely eloquent; they're often represented by gifted and skilled writers and speakers; and they have entree to many editorial pages. Whatever their motives, they can be very effective.

And the upshot may very well be that they're successful, regardless of their motives. I think that's the thing that we've got to guard against. One of the best ways to guard against it is to improve the hunter image. They zero in on the people that hunters don't like either--the slob. They characterize the hunters entirely on the basis of those who shoot cows or shoot one another or get drunk in camp. They feel that creatures are being unnecessarily exploited, and that nature, if left to its own devices, would take care of the problem very nicely and we could go on in a Walt Disney happy ending.

THREINEN, WISCONSIN: When will the hatchery report be done?

GREENWALT: The hatchery report is due to be finished the first week in August. That's the last word I have. This is the Calhoun report. Some of you who are members of the committee may know more about it than I do.

BOUSHELLE, MICHIGAN: What was the reason for the split dates on the various flyways.

GREENWALT: There are several reasons, and I want to repeat that these are proposals. First of all, gradual implementation will move against the lead-poison problem where it seems to be most acute, in the Atlantic Flyway, so that's why it's first. There must be time to enable ammunition manufacturers to produce ammunition in sizes other than the twelve-gauge in which it's now available, and the wholesalers and retailers have got to be able to get rid of their inventories of lead shot.

We're also interested in the law enforcement problems and in gaining hunter acceptance, and we'd like to work out the bugs in this system as quickly as possible. We also want to develop more refined information about the poisoning problem and the ways to deal with it before the proposal goes nationwide, particularly with respect to the Pacific and Central Flyways where lead shot is not quite as clear-cut a problem as it is in the East.

These are, I think, generally good reasons for not doing it right across the nation, but if you disagree or if you feel there ought to be another way or you question the rationale, you ought to respond to the Environmental Impact Statement which you'll all have a chance to look at.

WETTERSTEN, KANSAS: Will the report deal particularly with waterfowl or do webless birds come into it too?

GREENWALT: It will involve ducks, geese, swans and coots. Now the EIS contains not only a synopsis of the proposed regulations but a copy of them. That also ought to be looked at.

I was invited to stay and do some relaxing things tomorrow, but in the interval the Secretary decided that I and others of the Department would meet at Camp David for some discussions tomorrow. One thing that might very well come up is an anti-inflation proposal that would cut federal spending in 1975 by five or ten billion dollars. He's going to look at all of us and say, "How're you going to take a ten percent cut or a fifteen percent cut?" I'm not really looking forward to it, particularly when I understand I might have been fishing on Lake Superior instead.

Thank you all very much.

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Reconvened Thursday a.m. Session.

VICE PRES. HARRIS: Can you hear me? I think we can speed up this meeting. The first report we are to hear is the audit report from John Popowski.

POPOWSKI, SOUTH DAKOTA: Our Auditing Committee met after the Tuesday morning session. The Committee is made up of Fred Warders, Fred Priewert and Willard Barbee. I want to say that Fred Warders has done a good job in keeping the books in order. For the business year of 1973, total receipts were \$978.33 and there is a certificate of deposit for \$1,200. Total assets were \$2,178.33. For that year, expenditures were \$241.20, the same C.D. of \$1,200, cash in a checking account of \$737.13, for a total of \$2,178.33.

Now, I should point out that North Dakota put this organization on its feet. It cost the Association last year, for that meeting in Bismarck, \$241. The cash brought forward into that fiscal year was \$282, and we ended up, as I said, with \$2,178.

If your state or province has not paid its current dues, please send them in.

If it's in order, Mr. Chairman, I would move the acceptance of the audit report.

VICE PRES. HARRIS: Do we have a second? It's been moved and seconded that the audit report be accepted. Are there any questions? All those in favor, signify by saying "aye." Opposed? Motion passed.

The next item on the agenda is the treasurer's report from Fred Warders.

WARDERS, KANSAS: Here's a copy of what John reported on for those who want it. The report says that at the close of the Bismarck conference of the 1973 business year, we had a total of \$737.13 cash balance. Now we have a \$1,017.13 cash balance because eight states have paid their 1974 dues. Within a short time we will have \$1,367.13 when all the remainder (10 states and provinces) pay their 1974 dues.

Last year in Bismarck I reported to this conference that at the close of the 1972 business year we had approximately \$282 as a cash balance. This is an all-time low for the Association in cash. This is a result of at least three conferences prior to the Bismarck conference which spent more money than the dues and the interest on the certificate of deposit brought in. It was reported to this organization then that the group should take a look at its assets. Now, North Dakota put us on our feet because the Bismarck conference only cost us approximately \$241.

This low balance led to President Stuart appointing a committee to study the financial condition of the Association. This committee met in Denver, and Dave Vesall and I got together and went over the situation. We thought that probably the Association wouldn't have to consider this, because we're

back on our feet again.

I think the problem that this Association's going to have to discuss this morning is whether the states and provinces are going to absorb some of the expenses involved which would normally be charged to the Association, or is the Association going to foot the bills? In the past some of the charges that have been charged to the Association are, for instance, the printing of the program and the proceedings, hotel costs, duplicating machine rent, etc.

Gentlemen, the most we can take in is less than \$700. Three conferences prior to the Bismarck conference cost us well over \$1,000. Dave, as president of the special committee that President Stuart appointed, do you have any comments that you want to make?

VESALL, MINNESOTA: I think we should have a little discussion from the floor on this matter. If you have comments we'd appreciate hearing them now. Surely the dues structure of \$35 a member, with 18 members, is not sufficient to put on a conference if the states cannot absorb some of the costs. This conference is costing us about \$1,200 with the fish fry and the president's reception and some incidental costs. In addition, Minnesota has absorbed the cost of printing the program and some other costs. So it's a question of how much of the conference costs can be absorbed by the states. In Missouri, Carl, can you absorb some of the costs? I understand that Missouri is one of the states that may have some problems.

NOREN, MISSOURI: We'd prefer putting more money into the Association if we can properly safeguard it so it's used strictly for conference purposes. I don't believe it ought to go for entertainment. But I advocate putting more money into it rather than asking the states to defray costs that, maybe, get a little bit touchy.

VESALL: If our dues were about \$100, this would for the time being just about cover the cost of putting on a conference of this type. On the other hand, Treasurer Fred has reported that we should keep a balance of no more than \$5,000. If we get over \$5,000, then we're in trouble for income tax purposes. We lose our tax-exempt status.

NOREN: The International, as you know, has a problem too, and one of the ways it is solving it is to have associates for memberships--I've forgotten the exact term for it--but the various regional associations would pay affiliation memberships to the International which it would use for implementing its purposes.

VESALL: Mr. Chairman, I wonder does anybody else have an expression of opinion on this? How about Kansas? You went through this, Dick, just a couple of years ago.

WETTERSTEN, KANSAS: (Spoke in favor of a dues increase but recording is inaudible.)

VESALL: Carl Noren and Dick Wettersten both suggest that we consider a dues increase that would prevent financial drain on the states and put them in an awkward position. I think we could follow through on this, Fred, and come up with a proposed fee increase that would put a minimum of financial strain on the states that would be carrying on the conferences.

UNIDENTIFIED VOICE: I have no objection to raising the dues for the individual state and provincial members, but I don't think we're going to get anywhere with associates, Carl, because in the first place this is an association of game and fish directors, and I think we should keep it to that and finance it by dues from the individual states and provinces.

NOREN: I think what we meant by associates was in terms of the International. I was talking in terms of the affiliation of our Regional Association with the International. The fee for that is what I was talking about.

WETTERSTEN: I'd just like to suggest that the incoming president appoint another committee to make a firm recommendation about the dues.

VESALL: The suggestion from Dick Wettersten is that the incoming president appoint another committee to propose a dues increase after further analysis of the financial situation.

NOREN: I'm wondering also if we could have them look at registration fees too.

VESALL: Carl Noren suggested that Dick's proposal be broadened to include the total fiscal approach including the registration fees for putting on a conference. This is fine, Dick.

VICE PRES. HARRIS: Before you make a motion, I would suggest we ask the current president to do this because the incoming president doesn't take over until the first of January.

(Motion from the floor.)

It's been moved by Mr. Wettersten and seconded by Mr. Petroskey that we instruct the current president to continue the committee to study not only the state dues but the total financial picture and the Association's need for financing. The committee should report recommendations to the Association at the 1975 meeting, following the by-laws requirements. Any questions? All those in favor please signify by saying "aye." Opposed? Motion carries.

The last report is the nominations and time and place by Russell Stuart.

STUART, NORTH DAKOTA: The nominating committee of Rich Goulden of Manitoba, Mike Casey of Minnesota, and myself, submits the following names for officers for 1975: Chuck Harris of Michigan as President; John Popowski of South Dakota as Vice President; and Willard Barbee of Nebraska as second Vice President.

About two years ago, we determined to let the incoming President select his Secretary as well as the time and place for the next conference, and it was recommended that we retain the same Treasurer year after year because then there would be no necessity for withdrawing the certificate of deposit or other cash and transferring it to another state or province. So, again, I am nominating Fred Warders of Kansas as the Treasurer of the Association.

UNIDENTIFIED VOICE: I move that this report be adopted.

VICE PRES. HARRIS: It's been moved. Is there a second? Are there any other nominations? Then I assume the motion is to vote by unanimous ballot to accept the recommendations of the nominating committee. All those in favor please signify by saying "aye." Opposed? Motion carries.

I'd like to introduce a man from Michigan who's been with us, Gary Boushelle. Stand up, Gary, just for a minute. Gary is going to serve as my Secretary and will handle much of the business for our conference next year. We will meet at Traverse City, Michigan, on Grand Traverse Bay, during the week of July 13, the same week as we met here this year. We'll get information to you.

I think there's some new business to take up, now, and I believe that Dale Haney has a recommendation or a brief report to make.

HANEY, OHIO: Thank you, Chuck. The Awards Committee recommends that some thought be given to the establishment of categories for awards and the criteria used in the selection of nominees. We offer that recommendation, Chuck, for the next president and the next Awards Committee.

VICE PRES. HARRIS: Any discussion on that? If you're agreed, I'll instruct the Awards Committee next year to develop some criteria for an awards program. Is there any other new business?

WETTERSTEN, KANSAS: I don't know if this is new business or old business, but I just wanted to make a comment. As far as I'm concerned, the International Association, with the Washington office, is doing exactly what it's designed to do; and it's doing exactly what Dan Poole talked about in his opening address on Tuesday--it's providing a service--I guess best illustrated by the concerted effort on the Coordination Act testimony. I think if you sat back and looked at it, you'd find tremendous benefits from that office. My purpose in coming up here is to put in a pitch for the dues increase for the International to secure that office that we have in Washington.

VICE PRES. HARRIS: Any other business? Anybody have anything to say?

BARBEE, NEBRASKA: I feel that this Association should take some definite action about the dues because there's a substantial number of states represented here which will not be in Hawaii for the annual meeting. If you think that the financial situation of the Midwest is bad, you should look at the financial statement of the International, and then really consider what has been done for all of us through the efforts of the International through

Paul Lenzini. There is no financial statement that will show the amount of money, time and effort that Paul Lenzini and his law firm has provided this Association in some of the court decisions, such as the New Jersey case, and others that are pending.

So I would recommend that we seriously consider some official expression of feeling from this Association to the International Board so that they can have some representation from the states which will not be attending the meeting in Hawaii.

VICE PRES. HARRIS: Are you putting that in the form of a motion?

BARBEE: I think the recommendation is going to be an increase in the annual dues to \$1,500. So I move that the Midwest Association at its meeting here go on record in support of an increase in dues to \$1,500.

VICE PRES. HARRIS: Is there a second? Seconded by Dick Wettersten from Kansas.

I personally support what has been said regarding the International. I think we of Michigan have found the International, in their offices in Washington, Paul Lenzini's office, to be most helpful to us. Both of our past directors, Dr. MacMullan and Gene Gazlay, were most active in the International and I think by being active in the International your benefits are that much greater.

I think it's a little regrettable that we're meeting in such places as Disney World and Honolulu, as much as we like to go there, and then Las Vegas. In '76 we'll come down to earth and go to Detroit in the smog of the industrial world and probably have a bigger attendance than this year in Honolulu. We're only sending one person from our department--normally we'd send at least four or five--and I'm sure there just isn't going to be the attendance that there ought to be.

I think it's important, because many of the states may not be represented at the International's meeting in September, that this organization adopt such a motion as has been proposed. Is there any further discussion of the motion?

UNIDENTIFIED VOICE: (Unintelligible)

VICE PRES. HARRIS: Yes, that's right. You can give your proxy to a state that is going to be there so if this comes up for a vote, why, your vote will be registered. You might keep that in mind, many of the states that aren't going to be there. Any further questions? All those in favor of the motion please signify by saying "aye." Opposed? Motion carries.

STUART, NORTH DAKOTA: Chuck, you've touched on a very sore point with me as far as the International is concerned. I think the game and fish managers are really due for some criticism for holding meetings at Disney World and

Hawaii and so forth. If we just stop to think of the money that's going to be spent out of the state game and fish treasury to send just one person to Hawaii, I think we are entitled to a tremendous criticism. When I go out there I'm going to suggest two things: first that we pick a central spot to hold the meeting, and secondly, that we disassociate ourselves from the American Fisheries Society.

VICE PRES. HARRIS: I agree. Any other comments or suggestions or remarks that anyone wants to make?

If not, then I'll call this 1974 meeting of the Association of Midwest Fish and Wildlife Commissioners to a close, and again express our appreciation to the State of Minnesota for a very fine conference. You're a wonderful host; and the whole staff has been most helpful to us.

Meeting adjourned.

APPENDIX A

ATTENDANCE

<u>Place</u>	<u>Name</u>	<u>Agency Represented</u>
Colorado	Robert R. Elliott	Division of Wildlife
	Frank R. Richardson	U.S. Fish & Wildlife Service
	Robert Hoover	Division of Wildlife
	Ford Strong	Division of Wildlife
	Eugene Cook	Division of Wildlife
Illinois	absent	
Indiana	absent	
Iowa	Thomas A. Bates	Conservation Commission
	Les Licklider	Conservation Commission
	Fred A. Priewert	Conservation Commission
	Harry M. Harrison	Conservation Commission
Kansas	Richard D. Wettersten	Forestry, Fish & Game Commission
	John N. Luft	Forestry, Fish & Game Commission
	Fred Warders	Forestry, Fish & Game Commission
	Jack Haley	Forestry, Fish & Game Commission
Kentucky	Arnold L. Mitchell	Dept. of Fish & Wildlife Resources
Manitoba	Richard C. Goulden	Dept. of Mines & Resources
Michigan	Gary Boushelle	Dept. of Natural Resources
	Wayne H. Tody	Dept. of Natural Resources
	Merrill L. Petroskey	Dept. of Natural Resources
	Charles D. Harris	Dept. of Natural Resources
Missouri	Larry R. Gale	Dept. of Conservation
	P.G. Barnickol	Dept. of Conservation
	Carl R. Noren	Dept. of Conservation
	A.C. Hoefelman	Dept. of Conservation
	Ken Hicks	Dept. of Conservation

<u>Place</u>	<u>Name</u>	<u>Agency Represented</u>
Nebraska	Willard R. Barbee Stan Broman James W. McNair Ken Zimmerman	Game & Parks Commission National Park Service Game & Parks Commission Game & Parks Commission
North Dakota	Russell W. Stuart James C. Gritman W. Reid Goforth Keith W. Harmon	Game & Fish Department U.S. Fish & Wildlife Service Northern Prairie Wildlife Res. Ctr. Wildlife Management Institute
Ohio	Dale L. Haney	Division of Wildlife
Oklahoma	absent	
Ontario	D.R. Johnston Joseph Bryant K.K. Irizawa	Ministry of Natural Resources Canadian Wildlife Service Ministry of Natural Resources
South Dakota	Lawrence S. Kellogg Charles Q. Mateer John Popowski Rolf Wallenstrom	Game, Fish & Parks Commission Game, Fish & Parks Commission Game, Fish & Parks Commission U.S. Fish & Wildlife Service
Wisconsin	Edward J. Frank James T. Addis Harold Jordahl, Jr. Arthur R. Ensign Kent Klepinger Charles E. Johnson C.W. Threinen Les Voigt Earle A. Gingles Burton L. Dahlberg John H. Klingbiel	Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources Dept. of Natural Resources
Washington, D.C.	Daniel A. Poole Earl R. Cunningham Keith M. Schreiner	Wildlife Management Institute U.S. Fish & Wildlife Service U.S. Fish & Wildlife Service

<u>Place</u>	<u>Name</u>	<u>Agency Represented</u>
Minnesota		
Bemidji	Joan Mathisen	U.S. Forest Service
Duluth	Tom Bennett	Lake Superior Steelhead Assn.
	Jim Blugaugh	<u>News Tribune</u>
	Ray Dahl	Lake Superior Steelhead Assn.
	James Keuten	Lake Superior Steelhead Assn.
Virginia	Norman C. Johnson	U.S. Fish & Wildlife Service
Minneapolis	Wm. Daugherty	U.S. Fish & Wildlife Service
	Clarence E. Faulkner	U.S. Fish & Wildlife Service
	Jack E. Hemphill	U.S. Fish & Wildlife Service
	Robert J. Erickson	Federal Cartridge
	Bill Stevens	Federal Cartridge
	Chuck Griffith	National Wildlife Federation
	Ron Schara	<u>Minneapolis Tribune</u>
St. Paul	Will Haddeland	State Senate
	Hank Kehborn	<u>Dispatch-Pioneer Press</u>
	William H. Marshall	University of Minnesota
	David Mech	U.S. Fish & Wildlife Service
	R. D. Shoop	Muskies, Inc.
	Allen R. Vaughn	U.S. Dept. of Agriculture
	William Oemichen	U.S. Dept. of Agriculture
	Robert L. Herbst	Dept. of Natural Resources
	LeRoy Angell	
	Alfred Berner	
	Jim Brewer	
	Donald Burcalow	
	C.R. Burrows	
	Mike Casey	
	Merton Christian	
	Maureen Doody	
	Jay Janecek	
	Herbert B. Johnson	
	Jerome Kuehn	
	Maynard Nelson	
	Guy Oklobzija	
	Peg Reardon	
	Roger Schoenecker	
	W. J. Scidmore	
	Howard Shepperd	
	Hiram C. Southwick	
	Milt Stenlund	
	Dave Vesall	
	Merlyn Wesloh	

APPENDIX B

OFFICERS and COMMITTEE ASSIGNMENTS in 1974

President: Robert L. Herbst, Minnesota
First Vice President: Charles Harris, Michigan
Second Vice President: John Popowski, South Dakota
Secretary: Jerome H. Kuehn, Minnesota
Treasurer: Fred Warders, Kansas

RESOLUTIONS COMMITTEE:

Arnold L. Mitchell, Chairman--
Kentucky
Russell W. Stuart, North Dakota
John Popowski, South Dakota
Willard R. Barbee, Nebraska
Jack R. Grieb, Colorado
I.H. Standefer, Oklahoma
Fred A. Priewert, Iowa
L.P. Voigt, Wisconsin
Gene Gazlay, Michigan
Gene Bass, Indiana
Dan Armbruster, Ohio
G.E. Couldwell, Saskatchewan
R.C. Goulden, Manitoba
D.R. Johnston, Ontario
Richard Wettersten, Kansas
Mike Casey, Minnesota
Anthony T. Dean, Illinois

PRO HUNT COMMITTEE:

Carl R. Noren, Chairman--Missouri
Mike Casey, Minnesota
Fred A. Priewert, Iowa

LIAISON PHEASANT COMMITTEE:

Fred A. Priewert, Chairman--Iowa

AUDITING COMMITTEE:

John Popowski, Chairman--South Dakota
Fred A. Priewert, Iowa
Willard R. Barbee, Nebraska

WATER RESOURCES COMMITTEE:

Willard R. Barbee, Chairman--Nebraska
Anthony T. Dean, Illinois
G.E. Couldwell, Saskatchewan

LEGISLATION COMMITTEE:

L.P. Voigt, Chairman--Wisconsin
Jack R. Grieb, Colorado
R.C. Goulden, Manitoba
Richard Wettersten, Kansas

PROGRAM COMMITTEE:

David B. Vesall, Chairman--Minnesota
Willard R. Barbee, Nebraska
Jack R. Grieb, Colorado
Richard Wettersten, Kansas

NOMINATING COMMITTEE:

Russell W. Stuart, Chairman--North
Dakota
R.C. Goulden, Manitoba
Mike Casey, Minnesota

AWARDS COMMITTEE:

Dan Armbruster, Chairman--Ohio
Willard R. Barbee, Nebraska
Frank Lockhardt, Indiana
Arnold Mitchell, Kentucky

APPENDIX C

1974 RESOLUTIONS

ASSOCIATION OF MIDWEST FISH AND WILDLIFE COMMISSIONERS

1. Memorial to A. Gene Gazlay
2. Introduction of the Timber Wolf into the State of Michigan
3. Funding of Annual Production of Lake Trout at the Jordan River Fish Hatchery
4. Inadequate Surveys on Which BOR Plan is Based
5. Support of H.R. 14527 Amending Fish and Wildlife Coordination Act
6. Low Altitude Waivers to Allow Low Level Flying for Fish and Wildlife Operations
7. Redesign of Harvesting Equipment to Reduce Wildlife Losses
8. Management of Lake Erie Commercial Fisheries by a Quota System
9. Opposition to Anti-Leg-Hold Trap Legislation
10. Appointment of State and National Advisory Boards by the Secretary of Agriculture
11. Concern for Soil Erosion
12. Garrison Diversion Irrigation Project Wetland Mitigation
13. Request to Expand and Extend the Small Wetland Program Beyond 1976
14. Endorsement of the Right of American Citizens to Keep and Bear Firearms
15. Commending the Izaak Walton League of America
16. Seeking Study and Clearance of Candidate Fish Toxicants
17. Support of Proposed Amendment to Public Law 89-304, the Anadromous Fish Act
18. Appreciation for Minnesota's Hospitality and Excellent Program

Resolution #1

MEMORIAL TO A. GENE GAZLAY

WHEREAS, we have valued highly the inspired and dedicated service of Gene Gazlay to the Association of Midwest Fish and Wildlife Commissioners, to the Michigan Department of Natural Resources, and to the people of Michigan and to the nation; and

WHEREAS, his effectiveness in matters of federal aid and legislation at the national level in serving the International Association of Game, Fish and Conservation Commissioners is recognized by this Association; and

WHEREAS, his untimely death on June 30, 1974, while at the peak of his highly successful professional career, has deprived us of the services of an outstanding leader, administrator, gentleman and friend; and

WHEREAS, Gene Gazlay's accomplishments will live after him as a memorial to his talents and abilities;

NOW, THEREFORE, BE IT RESOLVED, that with deep grief and sorrow we, the members of the Association of Midwest Fish and Wildlife Commissioners, express our profound sympathy to Mrs. Lurella Gazlay and her children, Ray Scott and Maurine Kay, in the loss of their husband and father, A. Gene Gazlay. We of the Midwest Association mourn his passing and dedicate the proceedings of this 41st Annual Convention in tribute to his memory.

Resolution #2

INTRODUCTION OF THE TIMBER WOLF

INTO THE STATE OF MICHIGAN

WHEREAS, the timber wolf has disappeared from the mainland of Michigan with no reproducing social pack of these animals remaining; and

WHEREAS, an experimental introduction of four wolves from Minnesota into Michigan was made last winter for the purpose of re-establishing the species in that part of its range; and

WHEREAS, this was accomplished through the cooperative effort of several bodies, both public and private;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, commends all of those involved, including Northern Michigan University, the Huron Mountain Wildlife Foundation, and the National Audubon Society, which three financed the work and research; and including the Huron Mountain Club on whose lands the wolves were released; and including the Minnesota Department of Natural Resources, the Michigan Department of Natural Resources, and the U.S. Bureau of Sport Fisheries and Wildlife, cooperating; for conducting this unique experiment towards providing a more secure status for the timber wolf.

Resolution #3

FUNDING OF ANNUAL PRODUCTION OF LAKE TROUT

AT THE JORDAN RIVER FISH HATCHERY

WHEREAS, the F.Y. 1975 Administration budget request for the Bureau of Sport Fisheries and Wildlife, Jordan River National Fish Hatchery is \$100,000 less than is needed to maintain the 4.6 million annual lake trout production; and

WHEREAS, without this \$100,000 the lake trout plantings for the Great Lakes will have to be reduced by 2.0 million in 1975; and

WHEREAS, a reduction of this magnitude will have a dramatic impact on the Great Lakes fisheries of the States of Minnesota, Wisconsin, Illinois, Indiana, and Michigan; and

WHEREAS, the reduction will cause a serious setback in the international efforts to reestablish natural reproduction of lake trout in Lakes Superior, Michigan, and Huron;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, strongly urges the United States Congress to appropriate the full \$283,700 needed to maintain the annual production of 4.6 million lake trout at the Jordan River National Fish Hatchery;

BE IT FURTHER RESOLVED, that a copy of this resolution be forwarded to the chairmen of the Appropriations Committees of the House of Representatives and the Senate, and to the Secretary of the Interior.

Resolution #4

INADEQUATE SURVEYS ON WHICH BOR PLAN IS BASED

WHEREAS, the Bureau of Outdoor Recreation, through Secretary Morton, has presented the first nationwide Outdoor Recreation Plan to the President of the United States as outlined in Report No. 30; and

WHEREAS, Report No. 30 ranks all outdoor recreation on the basis of a three-month survey; and

WHEREAS, the remainder of the nationwide Outdoor Recreation Plan suggests a year-long recreation program with no year-long data base on which to develop such a program; and

WHEREAS, the Bureau of Outdoor Recreation will require all federal land managing agencies to use recreational visitor hours as a standard unit, which is strongly biased against hunting and those other outdoor activities requiring considerable physical stamina, and suggests that states and local governments do likewise without indicating the costs and benefits of changing to the visitor-hour standard;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, informs Secretary Morton and James Watt, Director of the Bureau of Outdoor Recreation, by copies of this resolution, of the Midwest Association's serious concern regarding the inadequate surveys on which this Outdoor Recreation Plan is based and regarding the misleading information thus obtained, especially as regards hunting, most of which occurs at a time of year not covered by the surveys;

BE IT FURTHER RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, requests that hunting and fishing be made a part of the Outdoor Recreation Plan and surveyed at an appropriate time; and the Midwest Association feels strongly that before changing recreational standard units from recreational days to recreational hours, there is need for justification of such change and need also for the concurrence of the other federal, state and local units providing hunting, fishing, and other outdoor recreation services.

Resolution #5

SUPPORT OF H. R. 14527

AMENDING FISH AND WILDLIFE COORDINATION ACT

WHEREAS, the present Fish and Wildlife Coordination Act has proven its value in preserving fish and wildlife values associated with federal projects under the control of certain federal agencies; and

WHEREAS, the current law does not require coordination of the projects and licensing activities of the Soil Conservation Service, the Atomic Energy Commission, the Tennessee Valley Authority, or the National Oceanographic and Atmospheric Administration; and

WHEREAS, H. R. 14527 proposes to include these agencies under the requirements of the Fish and Wildlife Coordination Act, and provides for an enlarged role for state fish and game agencies in making studies and recommendations under the Act;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, supports the passage of H.R. 14527 since it encompasses the most important changes necessary to insure preservation of fish and wildlife values associated with federal projects and federal licensing activities; and

BE IT FURTHER RESOLVED, that a copy of this resolution be forwarded to the Chairman of the House Subcommittee on Fisheries and Wildlife Conservation and the Environment for inclusion in the hearing record on H.R. 14527 and similar bills now being considered which would amend the Fish and Wildlife Coordination Act.

Resolution #6

LOW ALTITUDE WAIVERS TO ALLOW

LOW LEVEL FLYING FOR FISH AND WILDLIFE OPERATIONS

WHEREAS, a number of state fish and game departments (including California, Arizona, Nevada, and Minnesota) have recently had their low altitude waivers of Section 91.79(c) of the Federal Aviation Regulations cancelled, rescinded, or changed as to flight operations within 500 feet of property or persons on the surface; and

WHEREAS, it appears that other states, as well as the Atomic Energy Commission, agriculture, and helicopter operations have continued to receive waivers of Section 91.79(c); and

WHEREAS, there has been no satisfactory explanation given to the states which were refused waivers such as specific safety hazards, accidents, or dangers created by their fish and game flight operations to people or property on the surface; and

WHEREAS, without the authority to fly lower than 500 feet above surface level it is impossible for fish and game agencies to conduct low altitude wildlife census and surveys (waterfowl, big game, and habitat) in order to scientifically manage various wildlife and endangered species, participate in law enforcement activities, perform search and rescue flights, or environmental surveillance for the benefit of the people of the various states and the North American continent; and

WHEREAS, there appears to be flagrant discrimination against certain states, or this may be only the beginning of an insidious endeavor by the Federal Aviation Administration (FAA) to gradually take from all states this legal right;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, requests the International Association of Fish and Game Commissioners at their annual meeting in September 1974 to petition the FAA to produce specific evidence and cases of dangerous flight operations, and breaches of safe aerial procedures of fish and game operations under 500 feet, and show cause why certain states have had their low altitude waivers cancelled, rescinded, or changed; and

FURTHER BE IT RESOLVED, if the FAA cannot show cause, all waivers be reinstated immediately. If individual cases do show cause these will be handled on a case by case basis and not be indiscriminate blanket action that has no basis.

Resolution #7

REDESIGN OF HARVESTING EQUIPMENT

TO REDUCE WILDLIFE LOSSES

WHEREAS, the ring-necked pheasant is the primary game bird sought after by sportsmen and appreciative viewers of the wildlife resource; and

WHEREAS, this exotic game bird and other upland species suffer extreme mortality in excess of millions of pheasants annually resulting from agricultural harvesting equipment; and

WHEREAS, modern game management techniques and habitat improvements cannot at this time possibly compete with these tremendous losses;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, through the Midwest Pheasant Council, brings this matter to the attention of the following organizations: The Outdoor Writers' Association of America, the National Wildlife Federation, The Wildlife Management Institute, the major shooting arms manufacturers, and the organized sportsmen's associations of the respective states, to focus attention from all concerned citizens of the United States and to cooperate with the manufacturers of agricultural harvesting machinery to reassess the design of their harvesting equipment to eliminate this tremendous loss of wildlife resources.

Resolution #8

MANAGEMENT OF LAKE ERIE

COMMERCIAL FISHERIES BY A QUOTA SYSTEM

WHEREAS, migrant Great Lakes fish resources are common property; and

WHEREAS, the use of and resultant effect upon any Great Lakes fish resource is the sum of all governmental fisheries bordering that lake; and

WHEREAS, all states, four in the case of Lake Erie, plus Ontario, share the responsibility of conserving the fish resources; and

WHEREAS, any one of these agencies cannot independently protect, preserve, or rehabilitate Lake Erie fish resources by their management options; and

WHEREAS, a quota fisheries is a more desirable management option that will afford maximum protection to the Lake Erie fish brood stocks; and

WHEREAS, a legislative mechanism must exist within every agency before an International Quota Fisheries can be implemented in Lake Erie; and

WHEREAS, the State of Ohio has adopted, primarily through the efforts of its Department of Natural Resources, Division of Wildlife, Senate Bill 532, which along with many other major changes empowers the state to manage its Lake Erie commercial fisheries by a limited entry and a quota system;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, recognize this outstanding achievement, not only for its legislative accomplishment, but also for its use as an invaluable model to other governments in their legislation which, it is hoped, will ultimately culminate in a "Lakewide Quota Mechanism."

Resolution #9

OPPOSITION TO ANTI-LEG-HOLD TRAP LEGISLATION

WHEREAS, natural furs from furbearing wild animals are produced as a "product of the land" through natural processes as are other food and fiber products; and furbearing animals in acceptable wildlife management programs can renew their populations each year, as do other crops that are products of the land; and

WHEREAS, fur pelts produced as a product of the land do not consume or compete for scarce energy supplies; and artificial synthetic furs and garments require the use of scarce energy supplies such as petroleum; and

WHEREAS, the harvest and sale of wild furs greatly helps our rural economies, and at the same time returns many hundreds of millions of dollars to the United States from overseas sales; and the sale of these products of the land overseas greatly helps our country's balance of payments while the importation of scarce petroleum products to produce artificial furs would drain millions of dollars away from our economy; and

WHEREAS, wild furbearing animals not hunted and trapped would die naturally, usually at less than two years of age, and the natural death of a wild furbearing animal is invariably violent and due to predation, fighting, accident, starvation or disease, and wild furbearer populations of animals such as foxes, skunks, raccoons, etc., when not harvested by man develop serious diseases as a result of over-population; and disease epidemics are nature's way of controlling furbearer populations not controlled by trapping, and diseases such as mange, distemper and rabies cause great and prolonged misery to the animals afflicted, often a high percentage of a population; and

WHEREAS, there is no MORAL justification for preferring the unobserved violent natural death of a wild animal to the observed trapping death; and no other means exists for cropping the surplus of wild furbearing animals as a product of the land, and reducing the incidence of rabies and infectious diseases; and

WHEREAS, the management, harvest and regulation of resident wildlife is the sovereign and legal right of the individual states and not the federal government;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, goes on record in opposition to all anti-trapping legislation that would preclude the use of the leg-hold trap; and

BE IT FURTHER RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners notify members of Congress and Nathaniel P. Reed, Assistant Secretary of the Interior, of our opposition to the Bayh-Anderson bill and all similar bills that would prohibit the use of the leg-hold trap.

Resolution #10

APPOINTMENT OF STATE AND NATIONAL ADVISORY BOARDS

BY THE SECRETARY OF AGRICULTURE

WHEREAS, most small game hunting occurs on private lands; and

WHEREAS, Title X of the Agricultural and Consumer Protection Act of 1973 provides means for preserving and improving habitat for wildlife on private lands; and

WHEREAS, one such measure is the appointment of the State and National Advisory Boards authorized in Section 1007 (a) and (b); and

WHEREAS, this authority is now more than 12 months old; and

WHEREAS, the National Advisory Board and some State Advisory Boards have not been appointed;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, unanimously urges that the Secretary of Agriculture act promptly in appointing advisory boards specifically for the purposes provided in Section 1007 (a) and (b) of Title X.

Resolution #11

CONCERN FOR SOIL EROSION

WHEREAS, the current demand for agricultural commodities has resulted in intensified cropping practices and the destruction of millions of acres of vegetative cover in the Midwest; and

WHEREAS, such practices increase soil erosion and the pollution of public waters by sedimentation and associated chemicals and nutrients, resulting in the destruction of fish and wildlife habitat and spoiling of recreational areas; and

WHEREAS, recent SCS surveys of 9.5 million acres being converted nationally from forest and grasslands to croplands in 1974 show that wind and water erosion on 4.3 million acres is expected to exceed the allowable limit; and

WHEREAS, wind erosion in the Great Plains States has quadrupled in 1974 as compared to 1973; and

WHEREAS, very little scientific documentation is available as to the long-term effects of modern cropping practices on our soil and water resources; and

WHEREAS, Section 1005 of Title X provides the Secretary of Agriculture with authority to enter into multi-year contracts which could provide incentives for establishing and maintaining protective cover on land that has high erosion hazards;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, encourages the United States Department of Agriculture to establish on-land studies to document the past and projected impacts of modern agricultural practices upon the Midwest's soil and water resources; and

BE IT FURTHER RESOLVED, that the Association urges the Department of Agriculture to adopt more stringent measures to protect the soil from erosion and to prevent soil pollutants from entering public waters.

Resolution #12

GARRISON DIVERSION IRRIGATION PROJECT

WETLAND MITIGATION

WHEREAS, the Garrison Diversion irrigation project in North Dakota, to be constructed by the Bureau of Reclamation, is to provide mitigation and enhancement of wetlands for waterfowl production; and

WHEREAS, the U.S. Fish and Wildlife Service's Bismarck Area Office has recently completed a re-evaluation of the wetland mitigation and enhancement features as originally planned; and

WHEREAS, The Fish and Wildlife Service's re-evaluation has determined that the original wetland mitigation and enhancement proposal was based on insufficient and outdated biological data;

NOW, THEREFORE, BE IT RESOLVED, that the Bureau of Reclamation accept the U.S. Fish and Wildlife Service's re-evaluation and, in cooperation with the U.S. Fish and Wildlife Service and the State of North Dakota, redesign the wetland mitigation areas based on a more accurate inventory of the wetland losses and on scientific waterfowl production data; and

BE IT FURTHER RESOLVED, that copies of this resolution by the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, be sent to the Secretary of the Interior, the Bureau of Reclamation and the U.S. Fish and Wildlife Service.

Resolution #13

REQUEST TO EXPAND AND EXTEND

THE SMALL WETLAND PROGRAM BEYOND 1976

WHEREAS, The U.S. Fish and Wildlife Service's small wetland acquisition program is due to expire in 1976; and

WHEREAS, the Association of Midwest Fish and Wildlife Commissioners passed a resolution in 1973 in Bismarck, North Dakota, urging the U.S. Fish and Wildlife Service to expand and extend the small wetland program beyond 1976; and

WHEREAS, the U.S. Fish and Wildlife Service appears to have made only limited progress in designing and expanding the small wetland program beyond 1976;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, reaffirms its 1973 resolution urging the U.S. Fish and Wildlife Service to expand and extend the small wetland program beyond 1976. Copies of this resolution are to be forwarded to the Secretary of the Interior, the Director of the U.S. Fish and Wildlife Service, and Rep. John Dingell.

Resolution #14

ENDORSEMENT OF THE RIGHT OF AMERICAN CITIZENS
TO KEEP AND BEAR FIREARMS

WHEREAS, certain groups and individuals are attempting to register, control, prevent the sale of, and confiscate handguns; and

WHEREAS, the contention of these individuals and groups that "elimination of handguns will eliminate crimes involving them" is erroneous; and

WHEREAS, firearms do not commit crimes or cause injury or death by themselves, because they are inanimate objects; and

WHEREAS, the right to keep and bear arms is guaranteed by the United States Constitution; and

WHEREAS, handguns have many legitimate uses, including law enforcement, competitive shooting, recreational shooting and hunting; and

WHEREAS, excise taxes on handguns provide funds for firearms training and for natural resources programs; and

WHEREAS, safety training and education in the proper methods and uses of firearms provides a positive means of preventing firearms accidents and misuse;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, endorses the right of American citizens to keep and use all legal firearms suitable for hunting, competitive shooting, recreational shooting, and other lawful, legitimate uses; and

BE IT FURTHER RESOLVED, that hunter safety and firearms safety education be encouraged, promoted, supported and provided by this organization; and

BE IT FURTHER RESOLVED, that such firearms be retained in private ownership without registration.

Resolution #15

COMMENDING THE IZAAK WALTON LEAGUE OF AMERICA

WHEREAS, streams are often threatened in one way or the other by channelization or dredging or pollution; and

WHEREAS, it takes strong individual and community vigilance to maintain them in a high state of quality; and

WHEREAS, awareness and action are critical elements in this process; and

WHEREAS, the Izaak Walton League of America has sponsored a highly stimulating program entitled "Save Our Streams--Adopt One"; and

WHEREAS, such a program has the prospect of stimulating action and interest in protecting streams;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, commends the Izaak Walton League of America for its program and wishes the organization a maximum of success in promoting it.

Resolution #16

SEEKING STUDY AND CLEARANCE

OF CANDIDATE FISH TOXICANTS

WHEREAS, the chemical control of undesirable fish species with toxicants is an accepted management practice that has resulted in increased abundance of game fish and improved sport fishing; and

WHEREAS, certain undesirable species do not yield to the toxicants currently released for treatment usage by the Environmental Protection Agency while other, non-target, fishes are eliminated, thereby subjecting the agencies using chemical control measures to criticism by environmentalists; and

WHEREAS, certain candidate toxicants, including a specific carpicide, have recently been laboratory tested by the Bureau of Sport Fisheries and Wildlife and have shown potential promise to either reduce the mortality of non-target fishes or to eliminate fishes presently invulnerable while the chemical degrades into harmless components; and

WHEREAS, the U.S. Fish and Wildlife Service has no current plans to field test and expedite the clearance of the candidate toxicants with the Environmental Protection Agency;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, advocates a concentrated, immediate series of field tests under direction of appropriate U.S. Fish and Wildlife Service installations toward clearance of the candidate chemicals with the Environmental Protection Agency at the earliest opportunity.

Resolution #17

SUPPORT OF PROPOSED AMENDMENT

TO PUBLIC LAW 89-304, THE ANADROMOUS FISH ACT

WHEREAS, the Anadromous Fish Act, Public Law 89-304, has provided substantial aid funds for various fisheries projects on the Great Lakes; and

WHEREAS, the fisheries have benefited immensely from these expenditures; and

WHEREAS, there is currently before Congress the proposed amendment to Public Law 89-304 which would liberalize the funding from 50 percent to 75 percent for single state projects and 60 percent to 80 percent for a multi-state project; and

WHEREAS, the proposed law (H.R.11295) would also authorize the funding to increase from \$10,000,000 to \$20,000,000 per year;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners assembled at its 41st Annual Meeting this 17th day of July, 1974, at Duluth, Minnesota, herewith reaffirms its support of this legislation and requests that its officers make known the views of the Association to the Congress of the United States.

Resolution #18

APPRECIATION FOR

MINNESOTA'S HOSPITALITY AND EXCELLENT PROGRAM

WHEREAS, the 41st Annual Convention of the Association of Midwest Fish and Wildlife Commissioners was held in Duluth, Minnesota, July 15-18, 1974; and

WHEREAS, the Minnesota Department of Natural Resources served as the host agency;

NOW, THEREFORE, BE IT RESOLVED, that the Association of Midwest Fish and Wildlife Commissioners wishes to express appreciation to the State of Minnesota, to Robert L. Herbst, President, and to the staff of the Minnesota Department of Natural Resources for their hospitality.