

A.M.

9:00 Thomas Williams, Bureau of Sport Fisheries & Wildlife: "Use of Pellet-Group Counts to Determine Big Game Utilization of Proposed High Mtn. Sheep Area on Middle Snake, Oregon and Idaho"

9:30 Homer Ford, Bureau of Sport Fisheries & Wildlife: "Our Changing Role - The Division of Wildlife Services"

10:00 Keith Bayha, Bureau of Sport Fisheries & Wildlife: "Comprehensive River Basin Studies - Opportunity in Capital Letters"

10:30 Coffee

10:50 Robert Salter, Idaho Fish & Game Department: "Bio-politics in Wildlife Management"

11:20 Dr. Vincent Schultz, Washington State University: "The Nuclear Age and Environmental Problems"

11:50 Conference Appraisal: Dr. Maurice Hornocker, ICWRU

12:00 HEAD FOR THE HILLS!

Your Host: University of Idaho Student Chapter of THE WILDLIFE SOCIETY

OUTGOING OFFICERS (1968-1969 Biennium)

President - - - - - Elmer Norberg
Vice-President - - - Elwood Bizeau
Secretary-Treasurer - Keith Bayha

INCOMING OFFICERS (1970-1971 Biennium)

President - - - - Elwood Bizeau
Vice-President - - - Hawley Hill
Secretary-Treasurer - Ed Tilzey

OBJECTIVES

- The objectives of the Society are:
- (1) To establish and maintain the highest possible professional standards;
 - (2) to develop all phases of wildlife management along sound biological lines;
 - (3) to disseminate publications and other information that will accomplish these ends.

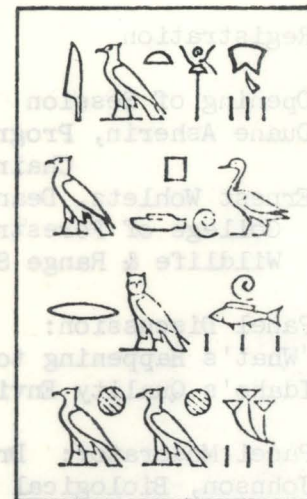
Efforts to achieve these objectives are guided by the Council and they are further supported by a Code of Ethics adopted in 1963.

IDAHO CHAPTER

of

THE WILDLIFE SOCIETY

Second Annual Winter Meeting



University of Idaho
Student Union Building
Moscow, Idaho
January 30-31, 1970

PROGRAM

January 29 (Thursday)

Early Registration
7:00 PM - 9:00 PM
Student Union Building
Main Lobby

January 30 (Friday)

A.M.

8:00 Registration

8:45 Opening of Session
Duane Asherin, Program
Chairman
Ernest Wohletz, Dean,
College of Forestry,
Wildlife & Range Sciences

9:00 Panel Discussion:
"What's Happening to
Idaho's Quality Environment?"

Panel Moderator: Dr. Donale
Johnson, Biological Sciences
Department, University of
Idaho

Panel Members

Dr. Lee Stokes, Idaho State
Department of Health: "The
Status of Water Pollution
Control in Idaho"

A.M.

9:25 Al Figuren, Idaho Air
Pollution Control
Commission: "Air Pollution
in Idaho"

9:50 Clyde Scott, Soil Conservation
Service: "Sediment - A Serious
Pollution Problem"

10:15 Coffee

10:35 Dr. Robert Harwood, Washing-
ton State University: "Do
Pesticides Actually Threaten
Our Environment?"

11:00 Sam Fall, American Smelting
& Refining Company: "The
Effects of Mining on the
Environment"

11:25 Panel Discussion Period

P.M.

12:00 Luncheon (Spalding and
Cataldo Rooms, SUB)
Ed Tilzey - Dick Norell:
Slide presentation of 1969
summer field trip

1st Technical Session
Chairman: Rod Drewien, ICWRU

1:10 John Beecham, Idaho
Cooperative Wildlife Research
Unit: "Breeding Biology of
the Golden Eagle in South-
western Idaho"

P.M.

1:40 William Snow, Idaho Fish &
Game Department: "Snow-
mobiles - a Factor in
Wildlife Work: Both Good
and Bad"

2:10 Neil Argy, Bureau of Sport
Fisheries & Wildlife:
"Wildlife Law Enforcement:
in the '70's"

2:40 Ray Rogers, Idaho Fish &
Game Department: "Mountain
Goat Trapping Techniques"

3:10 Coffee

3:30 Annual Business Meeting

5:00 Free Time

7:00 Banquet - Spalding & Cataldo
Rooms, Student Union Building

Guest Speaker:
Dr. W. Leslie Pengelly,
University of Montana
"The Impact of Oil
Exploration on Arctic Alaska"

January 31 (Saturday)

2d Technical Session
Chairman: Stuart Murrell,
Idaho Fish and Game Dept.

A.M.

8:30 John Drewek, Idaho Cooperative
Wildlife Research Unit:
"Status of Introduced
California Bighorn Sheep
in Owyhee County, Idaho"

A B S T R A C T S

IDAHO CHAPTER, THE WILDLIFE SOCIETY

SECOND ANNUAL WINTER MEETING

Moscow, Idaho

January 30-31, 1970

Panel Discussion

"WHAT'S HAPPENING TO IDAHO'S QUALITY ENVIRONMENT?"

1st Panel Speaker: Dr. Lee Stokes
Idaho State Department of Health

Title: "The Status of Water Pollution Control in Idaho"

The current legal power by which the Idaho Health Department may enforce water pollution abatement orders is manifested in the Board of Health Act as amended by the 1967 Idaho Legislature. This Act allows the Board to establish water quality rules and regulations which are binding on all individuals, industries and municipalities. Violators can be prosecuted through action by the office of the Attorney General. The Board of Health has issued abatement orders and enforcement schedules which affect all industries and municipalities in the state. Most point-source effluents will be reasonably well controlled by 1972. However, the people of Idaho must soon recognize the presence of another problem--a problem related to the eutrophication of lakes which are being developed as recreational areas--a condition whose effects are so insidious that they defy recognition without specialized analysis. Unless pollution control programs are extended to the point where this problem can be adequately analyzed, future use of our lakes as recreational areas may be in jeopardy.

2nd Panel Speaker: Al Eiguren
Idaho Air Pollution Control Commission

Title: "Air Pollution in Idaho"

Definition of air pollution and short discussion on major pollutants with emphasis on those found in Idaho. Description of the Federal approach to control. The following points will be covered:

- (1) Examples of pollution problems--past, present and future.
- (2) Existing abatement procedures and regulations.
- (3) Future approaches to environmental quality conservation.

3rd Panel Speaker: Clyde Scott
Soil Conservation Service

Title: "Sediment -- A Serious Pollution Problem"

In terms of quantity, sediment is the biggest single pollutant of our water supply. Sediment collects in our lakes, and rivers as a by-product of soil erosion from our farms, forests, highways, and urban and industrial developments. Most of this erosion results from improper land use or poor soil and water management. A generalized sediment production map of Idaho shows several critical areas. High sediment producing areas include the wheat-pea region of the Palouse and Nez perce Prairies, the Boise Front, and dry-farm wheat areas of southern Idaho. Good land use planning plus the installation of conservation systems can reduce soil erosion by 70-80 per cent.

4th Panel Speaker: Dr. Robert Harwood
Washington State University

Title: "Do Pesticides Actually Threaten Our Environment?"

Development of criteria for regulating the use of pesticides was initially almost entirely restricted to assuring human safety as based upon mammalian feeding studies utilizing rats and mice. It is quite clear that man has safeguarded his own health; with the compound DDT experiments have included prolonged dosage of human volunteers and detailed studies on the metabolism of this compound in higher vertebrates including man. Safety standards developed were partly based on the ability to detect pesticide residues. As detection procedures gained sophistication environmentalists have succeeded in alarming themselves and the general public over the demonstrable fact that certain pesticides, particularly DDT and related hydrocarbons, have become extremely widespread in the environment. It boils down to the knowledge that some pesticides are extremely widespread and persistent, but there is great disparity of opinion over the significance of this finding.

Several studies, investigative or merely monitoring in nature, show DDT to accumulate in various species of wildlife. In herbivores there appears to be no serious problem, but by bioaccumulation some species on the top of food chains may be in trouble. Notably in question are the Bermuda petrel, brown pelican, peregrine falcon, prairie falcon, and bald eagle. Likewise certain fishes have been observed to be severely affected by chlorinated hydrocarbons. In these instances the main difficulty appears to be reproductive failure rather than directly toxic effects. While there may be a DDT-related reproductive problem, bird counts by the Audubon Society as well as studies comparing pesticide levels in successful and declining populations leave some doubt that DDT and other chlorinated hydrocarbons are causal. Additional chemical pollutants, particularly polychlorinated biphenyls (PCBs), are also suspect. Furthermore, while there is reason to doubt the seriousness of pesticide-related problems on significant numbers of wildlife, it is a readily observable fact that more direct encroachments of man are extremely detrimental to habitat.

The long-lasting accumulative effects of chlorinated hydrocarbons makes it appear prudent to greatly reduce their use. Accordingly the U.S. Department of Health Education and Welfare, and the Pesticides Regulation Branch of the U.S. Department of Agriculture, have taken steps to immediately ban uses of DDT for households, shade tree protection, and aquatic environments. All other uses of DDT are to be banned excepting those believed essential to human health and welfare, namely those uses lacking satisfactory substitutes. For North America there has been even more restrictive action against DDT in certain states and provinces. At the federal level a phase out is scheduled for other persistent chlorinated hydrocarbon insecticides, and certain herbicides and fungicides are also being questioned.

If the world human population level is not controlled pesticides will be used on a worldwide basis at ever higher rates for food production. Persistent pesticides are used because of their economy, particularly in developing countries where labor is cheap but manufactured products are costly. In North America, and probably much of Europe, other approaches to pest control as well as nonpersistent pesticides will be fully exploited. Only human population control and political

constraints are likely to radically diminish the use of persistent pesticides in the remaining food-producing areas of the world.

For the Pacific Northwest we have no substantial evidence of permanent wildlife decline due to pesticides. This being the case the most serious future threat to wildlife will be the continued direct destruction of habitat.

1st Technical Session

"BREEDING BIOLOGY OF THE GOLDEN EAGLE IN SOUTHWESTERN IDAHO"

By: John Beecham
Idaho Cooperative Wildlife Research Unit

I studied the breeding biology of the golden eagle (Aquila chrysaetos) in southwestern Idaho during 1968 and 1969. The study area centered along the Snake River canyon between Bliss and Marsing, Idaho. I located 25 and 36 nesting pairs during 1968 and 1969, respectively. Golden eagles laid an average of 2.1 eggs per eyrie during 1969. In 1968, 1.48 eaglets fledged per eyrie, while .86 fledged in 1969. I identified 480 prey items. Blacktail jackrabbits and desert cotton-tails dominated the prey taken. Game species made up 15 per cent of the diet.

"SNOWMOBILES -- A FACTOR IN WILDLIFE MANAGEMENT"

By: William Snow
Idaho Fish and Game Department

In 1959, Joseph-Armand Bombardier built the first practical, light-weight snowmobile. Since 1964 there has been a tremendous growth in the use of the machine. In 1964 there were approximately 8,000 snowmobiles in use in the U.S.. This figure is expected to grow to approximately 500,000 during 1970, with about 15,000 of them owned by residents of Idaho.

As was the case when other mechanized vehicles, i.e. the motorcycle and four-wheel drives, entered the picture, the snowmobile has also had both good and bad effects on wildlife and their management.

Most snowmobiles, owned by the general public, are used for legitimate recreational and business reasons. However, a rather numerous minority of "sportsmen" and recreationists are utilizing snowmobiles to both knowingly and unknowingly chase and harass game and non-game animals to the point of exhaustion and sometimes death. Other so-called "sportsmen" have found, in the snowmobile, a new tool to aid in poaching activities.

Because of their flatter, more open terrain, the Midwestern states, especially those in the Great Lakes area, have felt the adverse effects of snowmobiles more than we have in Idaho. Most of Idaho's snowmobile problems have been in the Eastern and Southeastern parts of the state.

While snowmobiles have had their bad effects, they have also proven to be an aid to the wildlife manager in such activities as checking range and water conditions, making game counts and performing other related duties.

"WILDLIFE LAW ENFORCEMENT IN THE 70'S"

By: Neil Argy
Bureau of Sport Fisheries and Wildlife

The Game Law Enforcement Officer is the resource agency's main representative in the field. His role in conservation has been continuously changing especially with the advent of modern concepts in wildlife management. With the rapid population expansion in the 70's, the Officer will have to adapt his role to meet the challenge created by this expansion.

"MOUNTAIN GOAT TRAPPING TECHNIQUES"

By: Ray Rogers
Idaho Fish and Game Department

Mountain goat trapping in Idaho has been underway since 1958. During this twelve year period, 95 goats have been trapped and handled. Sixty-three were successfully transplanted, while 25 were marked and released. Seven died in the traps or while being transported.

Traps used included the individual clover type and a net corral 30 feet in diameter. Rope snares also proved successful. Block salt was used to lure the animals into the traps.

Late June and early July trapping gave the best success. Warm, sunny weather attributed to increased goat activity. Use of salt by the animals declined rapidly after mid-July.

The traps were manually tripped in order to be selective as to sex ratios and age classes. Yearling and two-year old animals were ideal for transplanting. Adult goats were captured when neck collars were used for marking.

Losses occurred only in the adult group. Neck injuries and bloat were the two primary causes of death.

2nd Technical Session

"STATUS OF INTRODUCED CALIFORNIA BIGHORN SHEEP IN OWYHEE COUNTY, IDAHO"

By: John Drewek
Idaho Cooperative Wildlife Research Unit

Results of twelve months of field work on an introduced population of bighorn sheep will be briefly reviewed. Among the points to be discussed will be the bighorn habitat, distribution, herd structure, productivity, and various factors acting upon the population.

"USE OF PELLET-GROUP COUNTS TO DETERMINE BIG-GAME UTILIZATION OF PROPOSED HIGH MOUNTAIN SHEEP POOL AREA ON MIDDLE SNAKE, OREGON AND IDAHO"

By: Thomas Williams
Bureau of Sport Fisheries and Wildlife

Total of 8.5-acres of circular plots in transects of 120 100-sq.ft. and 5 to 20 0.01-acre plots were established in specific grassland types in Oregon and Idaho, respectively. Subsequent to establishment (including pellet-group removal), pellet-groups were counted and removed during first week of April and last week of October in 1968 and 1969. Accuracy of data for most seasons and areas was within 15 per cent of mean 90 per cent of the time.

"OUR CHANGING ROLE -- THE DIVISION OF WILDLIFE SERVICES"

By: Homer Ford
Division of Wildlife Services

The Division of Wildlife Services (BSFW) was reorganized about four years ago as a successor to the Division of Predator and Rodent Control. Redirection was given to animal damage control to accomplish specific objectives in preserving public health and safety, improving agricultural production, protecting wildlife and other natural resources, and protecting urban and industrial interests. The Division assumed added responsibilities in the field of wildlife enhancement and pesticide surveillance.

"COMPREHENSIVE RIVER BASIN STUDIES -- OPPORTUNITY IN CAPITAL LETTERS"

By: Keith Bayha
Bureau of Sport Fisheries and Wildlife

Despite the important influence which water development projects have on fish and wildlife resources, only a handful of biologists are directly involved in water development planning. In Idaho, as in many other states, the greater portion of wildlife professionals are at best only partially informed of what is happening in this field.

The purpose of the paper is to illuminate the subject of comprehensive river basin studies, the difference between these studies and those of specific water development projects, the role they play in long-range water development planning, and the opportunity they present for greater emphasis of fish and wildlife conservation and development. Plans for future comprehensive studies in the Pacific Northwest, particularly those involving Idaho, are outlined. An appeal is made for greater input of ideas from those fish and wildlife workers nor directly involved in water development planning.

"THE NUCLEAR AGE AND ENVIRONMENTAL PROBLEMS"

By: Vincent Schultz
Washington State University

Nuclear testing of military devices, establishment of nuclear reactors and peaceful uses of nuclear explosives result in a concerned public as to radiation hazards to man and the environment. Much of the concern results from inadequate knowledge of safety precautions and radiation effects. It behooves the biologist who is emotionally disturbed by environmental pollution to become aware of the facts.

An attempt is made in this very brief presentation of an enormously complex subject to expose the listeners to sources of information and my opinion of the possible hazards of interest to wildlife and fisheries biologists.