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Jerry M. Conley, Director

Project W-168-C-2



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July 1, 1984 - June 30, 1985

Study 1, Job 1: Wildlife Research Coordination

By

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Wildlife Research Manager

February 1986

STATE: Idaho PROJECT NO.: W-168-C-2
STUDY: 1 JOB TITLE: Wildlife Research
JOB: 1 Coordination
STUDY TITLE: Wildlife Research

PERIOD COVERED: July 1, 1984 - June 30, 1985

ABSTRACT:

Project supervision was maintained for all wildlife research projects, including study plan development, document preparation, report editing, submitting project progress and final reports, and budget preparation. Federal aid coordination was provided for all wildlife research, management, and land development projects.

OBJECTIVES:

To plan project work and to provide supervision and administrative support for all P-R funded projects.

FINDINGS:

Project documentation, budgets, reports, and personnel evaluations were completed for each field project. Work was also completed on developing a research plan to guide future research efforts in the state.

A general summary of the activities of the research biologists during the year follows:

Subproject No. 22: Elk Ecology.

Principal Investigator: Lonn Kuck, Michael D. Scott, and James W. Unsworth, and

Subproject No. 5: California Bighorn Sheep Ecology.

Principal Investigator: Michael D. Scott.

ABSTRACT:

The primary accomplishments of the 1984-85 work year was completion of field research on the caribou project and the development of elk and bighorn sheep research problem analyses and study plans. Results of the caribou study were disseminated through 21 slide presentations to lay and professional groups, written reports, a caribou habitat evaluation computer model, recommended caribou habitat management guidelines, and informal consultations with agency land managers. A caribou herd augmentation plan and environmental analysis was completed. A professional paper and semi-popular book chapter were published, as well as progress report, a draft bighorn sheep management plan, and two research problem analyses and study plans.

REPORTS, PUBLICATIONS, ARTICLES:

- Anon. 1985. Bighorn sheep 1986-1990 species management plan. Idaho Department of Fish and Game.
- Kuck, L., M.D. Scott, and J.W. Unsworth. 1985. Elk ecology problem analysis and study plans. Pages 1-103 in Idaho Department of Fish and Game statewide wildlife research study plans. Project W-160-R. 304pp.
- Marcum, C.L. and M.D. Scott. 1985. Influences of weather on elk use of spring-summer habitat. J. Wildl. Manage. 49(1):73-76.
- Marcum, C.L., W.D. Edge, M.D. Scott, J.F. Lehmkuhl, and S.L. Olson. 1984. Final report of the Chamberlain Creek elk study, 1975-1984. Univ. of Montana School of Forestry. 257pp.
- Scott, M.D. 1985. California bighorn sheep ecology problem analysis and study plans. Pages 104-170 in Idaho Department of Fish and Game statewide wildlife research study plans. Project W-160-R.
- Scott, M. 1985. The woodland caribou. Pages 494-507 in Audubon Wildlife Report 1985. The National Audubon, New York. 671pp.
- Scott, M. and G. Servheen. 1984. Caribou ecology. Idaho Department of Fish and Game Job Progress Report. Project No. W-160-R-11. 78pp.

MEETINGS AND PRESENTATIONS:

- 7/16 Bonners Ferry Ranger District and Sen. McClure's staff. Review of USFS endangered species management. Bonners Ferry.
- 7/20 Coeur d'Alene Chapter of Idaho Wildlife Federation. Presented caribou slide talk. Coeur d'Alene.
- 8/28-30 Wildlife Bureau biologist's meeting. Presented caribou research update. Clark Fork.
- 9/5 Region 1 - Wildlife Bureau personnel meeting. Coeur d'Alene.
- 9/6 Caribou Herd Augmentation Team. Spokane.
- 9/7 International Mountain Caribou Technical Committee Executive Board. Presented caribou research update. Spokane.
- 9/11 Lethbridge Community College students. Presented caribou slide talk. Creston, B.C.
- 9/25 Caribou Steering Committee. Presented caribou research update. Bonners Ferry.
- 10/4 Region 1 enforcement training. Coeur d'Alene.

- 10/26 Elk research team and Lou Nelson. Coeur d'Alene.
- 10/30 Interagency (IDFG, U. of I., USFS, USFWS, and B.C. Wildlife Branch) meeting to discuss expenditure of USFWS research monies. Bonners Ferry.
- 11/7 Elk research team. Lewiston.
- 11/27 W-I and LP Corporation foresters. Presented caribou slide talk. Sandpoint.
- 12/7 International Mountain Caribou Technical Committee. Presented caribou research update. Coeur d'Alene.
- 1/17-18 Wildlife Biologists/Land Managers meeting. Boise.
- 1/28 Trout Creek timber sale interdisciplinary team. Bonners Ferry.
- 2/4 Gifted and talented elementary students. Presented caribou slide talk. Bonners Ferry.
- 2/5 Kootenai Valley Sportsmen's Association. Presented caribou slide talk. Bonners Ferry.
- 2/20 U. of I. undergraduate and graduate wildlife students. Presented caribou slide talk. Moscow.
- 3/1 International Mountain Caribou Technical Committee. Presented caribou research update. Creston, B.C.
- 3/6 Evergreen Elementary School. Presented caribou slide talk (twice). Bonners Ferry.
- 3/8-9 Idaho Chapter, The Wildlife Society. Presented caribou slide talk. Boise.
- 3/12 Rocky Mountain Academy. Presented caribou slide talk. Bonners Ferry.
- 3/14 Bonners Ferry Community Education Course. Presented caribou slide talk. Bonners Ferry.
- 3/16 Public meeting on bighorn sheep 5-year management plan.
- 4/2 Region 1 - Wildlife Bureau. Coeur d'Alene.
- 4/3 Region 1 - Administrative Bureau. Coeur d'Alene.
- 4/4 Bonner County Sportsmen's Association. Presented caribou slide tape and video tapes. Sandpoint.

- 4/17 Kootenai National Forest and Montana Department of Fish, Wildlife and Parks. Presented caribou slide talk. Libby, Montana.
- 4/23-24 Wildlife research section meeting. Boise.
- 5/23 Management plan species team leaders. Boise.
- 6/7 International Mountain Caribou Technical Committee. Presented caribou research update. Creston, B.C.

Subproject No. 22: Elk Ecology.
Principal Investigator: Lonn Kuck.

ABSTRACT:

The problem analysis procedure was utilized to develop study plans for Idaho's elk ecology project. These procedures were used to develop four elk research studies. These studies include: (1) bull elk habitat use; (2) elk sightability; (3) elk habitat security characteristics; and (4) hunting season mortality rates. The original intent of the elk research program was to implement the same four studies simultaneously on three different study areas of Idaho, including the Coeur d'Alene River drainage, the Clearwater River drainage, and the other in central Idaho. Inadequate funding has forced the cancellation of the Coeur d'Alene and central Idaho studies in order to fully implement the Clearwater study. The majority of field activities was directed toward the enhancement of closed canopy observations for development of the elk sightability model. A total of 53 sightability observations were generated, including 41 observations in closed canopy habitat types. Elk were censused in Unit 12 using the elk sightability model and sampling procedures. Preliminary results indicate a total of 5,129 plus/minus 350 at 90% bound. A calf/cow ratio of 28 calves:100 cows plus/minus 4.2 was observed; with a bull/cow ratio of 43 bulls:100 cows plus/minus 2.9 and a spike/adult ratio of 38.9 spikes:100 adult bulls plus/minus 4.3.

REPORTS, PUBLICATIONS, ARTICLES:

- Ackerman, B.B. 1985. Conda partnership wildlife study. Final report. Idaho Dept. Fish and Game, Boise. 334pp.
- Kuck, L., G.L. Hompland, E.H. Merrill. 1985. Elk calf response to simulated mine disturbances in southeast Idaho. J. Wildl. Manage. 49:751-757.
- Kuck, L. and J.W. Unsworth. 1985. Elk Ecology. Fed. Aid Prog. Rep. W-160-R-12, Idaho Dept. Fish and Game. 23pp.
- Kuck, L., J.W. Unsworth, M.D. Scott. 1985. Clearwater elk ecology unregulated harvest of Shiras moose in Idaho. N. Am. Moose Conf. and Workshop (in Press).

MEETINGS AND PRESENTATIONS:

- 7/17 Elk sightability Meeting. Moscow.
- 7/22 Wildlife Bureau - University of Idaho Wildlife Staff Meeting. Moscow.
- 8/2-3 Drug Handling Workshop. Boise.
- 8/20-21 Departmental Computer Use Training. Lewiston.

8/22-23 Clearwater N.F. Interagency Summer Tour. Lochsa River.
 8/27-30 Summer Biologist Meeting. Clark Fork.
 8/31 Enforcement Training. Lewiston.
 9/4 Wildlife Bureau/Region 2 Coordination Meeting. Lewiston.
 9/5 Fisheries Bureau Meeting. Lewiston.
 9/10-12 Tri-State Elk Habitat Assessment Meeting. Olympia, WA.
 9/17-20 Elk Research Team Meeting. Yellowstone National Park.
 10/9 DCO Meeting. Kamiah.
 10/24-25 Elk Research Team Meeting. Lewiston.
 10/29-30 Commission Meeting. Lewiston.
 11/7 Elk Research Team Meeting. Lewiston.
 11/9 Elk Sightability Meeting. Moscow.
 11/13 DCO Meeting. Kamiah.
 11/15 Elk Sightability Meeting. Lewiston.
 11/19 Principal W.R.B. Meeting, Boise.
 11/28 Elk Research Team Meeting. Lewiston.
 11/29 Rotary Club. Pocatello. Gave phosphate slide series.
 12/6 Elk Sightability Coordination Meeting. Lewiston.
 12/11-12 Principal W.R.B. Meeting. Boise.
 1/8 Wildlife Depredation Meeting. Lewiston.
 1/16-19 Winter Biologist Meeting. Boise.
 1/22 Elk Management Meeting. Lewiston.
 2/13 Mountain Goat Species Management Team Meeting. Lewiston.
 2/14-15 Elk Management Direction and Philosophy Meeting. Craig Mountain WMA.
 2/26-27 Forestry Industry Meeting with Director and Commission representatives. Boise.

- 3/4 University of Idaho Wildlife Graduate Seminar. Moscow. Gave mountain goat management slide series.
- 3/21 New Recruit Tour. Lewiston. Gave elk sightability slide series.
- 4/1 Region 2 Personnel Meeting. Coeur d'Alene. Gave elk sightability slide series.
- 4/2 Region 1 Personnel Meeting. Coeur d'Alene. Gave elk sightability slide series.
- 4/4 Idaho Mining Association/Idaho Fish and Game Commission Meeting. Boise.
- 4/5 Rocky Mountain Elk Foundation. Spokane, WA.
- 4/15 Region 4 Personnel Meeting. Jerome. Gave elk sightability slide series.
- 4/16 Region 6 Personnel Meeting. Idaho Falls. Gave elk sightability slide series.
- 4/17 Region 5 Personnel Meeting. Pocatello. Gave elk sightability slide series.
- 4/18 Region 3 Personnel Meeting. Boise. Gave elk sightability slide series.
- 4/23 Wildlife Research Meeting. Boise.
- 5/23 Species Management Plan Meeting. Boise.
- 6/7 International Caribou Technical Committee. Creston, B.C.

Subproject No. 1: Mule Deer Ecology.
Principal Investigator: Cecil Brown.

ABSTRACT:

July 1, 1984-June 30, 1985 was spent primarily writing. Primary areas of concern were: Working on completion report for the Sand Creek elk study; working up problem analysis of mule deer research needs and, identification of potential areas for study; design of research to be conducted on mule deer; and development of detailed study plans, with priorities, to accomplish designated research. Research is to be conducted in Units 73-73A on mule deer in two general areas. Study I is to identify and describe discreet mule deer herds in Game Management Units 73 and 73A. Study III is to identify and describe the role of environmental components providing security to mule deer and the behavioral adaptations used to achieve security by male and female mule deer in southeastern Idaho. Field work was initiated on Study I, with a total of 73 different deer captured and marked; 17 with radio collars on four different winter ranges in Unit 73. The radio-collared deer were monitored for movement and seasonal ranges selected were identified.

REPORTS, PUBLICATIONS, ARTICLES:

Brown, C.G. 1985. Ecological relationships of mule deer in southeastern Idaho habitats--problem analysis, pages 171-197 in J. Beecham, ed. Statewide Wildlife Research Plans. Fed. Aid Completion Report W-160-R. Idaho Dept. of Fish and Game, Boise.

Brown, C.G. 1985. Mule Deer Ecology. Fed. Aid Study Proposal W-160-R, Subproject No. 1, pages 198-224 in J. Beecham, ed. Statewide Wildlife Research Study Plans. Fed. Aid Completion Report W-160-R. Idaho Dept. of Fish and Game, Boise.

Brown, C.G. 1985. Mule Deer Ecology--Study I. Mule deer population identification. Fed. Aid Progress Report W-160-R-12. Idaho Dept. of Fish and Game, Boise.

MEETINGS AND PRESENTATIONS:

8/17 New Idaho Fish and Game Department Personnel Statewide Tour, Idaho Falls. Presentation on Sand Creek Elk Study.

8/28-9/3 Summer Wildlife Biologists Meeting. Clark Fork.

9/11 Region 5--Bureau of Wildlife Coordination Meeting. Pocatello.

9/18 Region 6--Personnel Meeting. Idaho Falls.

11/8 Research Meeting. Pocatello.

- 11/15 Interagency meeting to discuss mule deer needs in southeast Idaho, BLM-Burley District, USFS-Caribou Forest, Idaho Fish and Game, Regions IV and V. Pocatello.
- 12/27-29 Rangelands--Fire Effects Symposium. Boise.
- 1/17-18 Wildlife Biologists Meeting. Boise.
- 1/25 Tape coverage of deer trapping with 519.
- 2/21 Meeting with Phil Urness, U.S.U. on deer research needs and approaches. Logan.
- 2/28 Meeting on deer sightability study. Pocatello. Ackerman, Oz Garton, Randy Smith, Hemker, Davidson, Autenrieth, and myself.
- 3/3-4 Meeting with Dick Mackle, Ken Hamlin, and others on mule deer research needs, Bozeman part of Mule Deer Workshop.
- 3/19 Region 5 meeting on big game season recommendations. Pocatello.
- 3/25-26 Region 5 meeting on species plans. Pocatello.
- 4/17 Regional personnel meeting. Pocatello.
- 4/23-24 Research Section Meeting. Discussion of study plans and problem analysis. Boise.
- 6/11-12 USFS-Idaho Fish and Game. Interagency Field Trip, Units 70, 73, and 56. Gave presentation on Mule Deer Study.

Subproject No. 10: Sage Grouse Ecology Project.
Principal Investigator: Bob Autenreith; Jeff Marks.

ABSTRACT:

Writing continued on antelope ecology completion reports and preparation of sage grouse problem analysis and study plans. Data analysis was initiated on a computer analysis of 23 years of weather and sage grouse production data, and field assistance was provided on the sharp-tailed grouse study in the Weiser area.

MEETINGS:

Meetings attended and presentations are as follows:

- 7/23 Attended upland bird season recommendations meeting in Pocatello.
- 7/31-8/1 Attended Range Society Sagebrush-Grassland Ecology and Management Workshop in Medicine Lodge area.
- 8/2-3 Attended drug safety and handling workshop in Boise.
- 8/20 Slide presentation on antelope research to new employee training group.
- 8/28-30 Attended annual biologists meeting at Clark Fork.
- 9/11 Attended Bureau of Wildlife-Region 5 coordination meeting in Pocatello.
- 9/12-13 Attended computer operations meeting in Pocatello.
- 1/17-18 Attended annual winter biologists meeting in Boise.
- 2/20 Met with J. Beecham, L. Nelson, and J. Connelly to discuss sage grouse study plans in Jerome.
- 3/2 Gave presentation on sage grouse and antelope ecology to Wildlife-Range relationships class at USU in Logan.
- 3/14 Attended Bureau of Administration-Region 5 coordination meeting in Pocatello.
- 4/23-25 Attended research biologists meeting in Boise.
- 6/11-12 Attended field tour of Caribou National Forest.

Submitted by: John J. Beecham
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Approved by:

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