602

WILDLIFE

PROJECTS

1985

Yukon
Department of Renewable Resources
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YUKON WILDLIFE

MANAGEMENT PROJECTS

1985

Government of Yukon
Department of Renewable Resources
Box 2703
Whitehorse, Yukon
Y1A 2C6

Hon. David Porter, Minister

YUKON WILDLIFE MANAGEMENT PROJECTS

These summary sheets are designed to give persons within the Government of Yukon and others with a direct interest in wildlife management in Yukon, an overview of where effort is being directed by staff of the Department of Renewable Resources in the 1985-86 fiscal year. The problems being addressed, methods applied, and areas of the Yukon where work is being conducted are emphasized. All wildlife projects will result in written reports upon completion and most produce interim reports annually.

The projects fall into broader areas of concern as follows:

SHEEP AND GOAT MANAGEMENT

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

The effect of wolf predation on Dall Sheep

Project Leader(s): N. Barichello

Assistance: Whitehorse

R. Hayes

Date Initiated: 1984

Duration: continuing

Location:

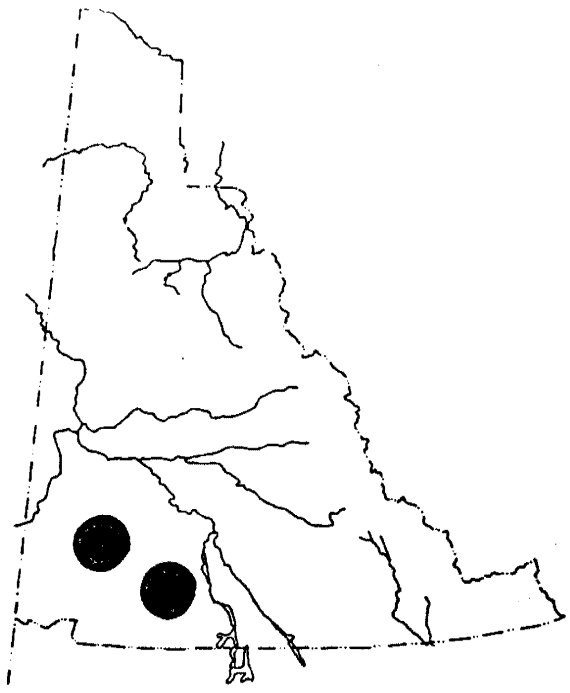
District: Whitehorse

GMZ: 5 & 7

Dates of Field Work: June

Operational Budget (YTG): $8 thousand

Cooperators:



Reason for Project:

Winter mortality remains one of the biggest gaps in our understanding of sheep ecology. Preliminary wolf work suggests that wolves may be important Dall sheep predators, particularly in late winter. As part of a wolf removal scheme, wolves in one area were all but eradicated while wolves in an adjacent area were left intact. If wolves are important predators on Dall sheep there should be a measurable difference in the sheep demography in the two areas, both in the total count as well as the productivity.

Cooperating Agencies:

Foundation for N.A. Wild Sheep

Progress to Date (Summary of Results):

Current Year Objectives, Plans:

Sheep will be counted and classified in one area where wolves have been removed (GMS 7-23 and 7-30) and in a nearly control area (GMS 5-31 and 5-34). Surveys will be done in June with a 206B helicopter. If necessary classification of sheep will be carried out on the ground during the survey.

Publications, Reports:

Progress Report - April, 1984

"Wolf-Dall sheep relationships in the Southern Yukon: a pilot study"

Current Year Report Due:

Final Report Due: February, 1986

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

Mountain Goat Inventory

Project Leader(s): N. Barichello

Assistance: Casual Technician

Date Initiated: 1984

Duration: continuing

Location: Carcross area

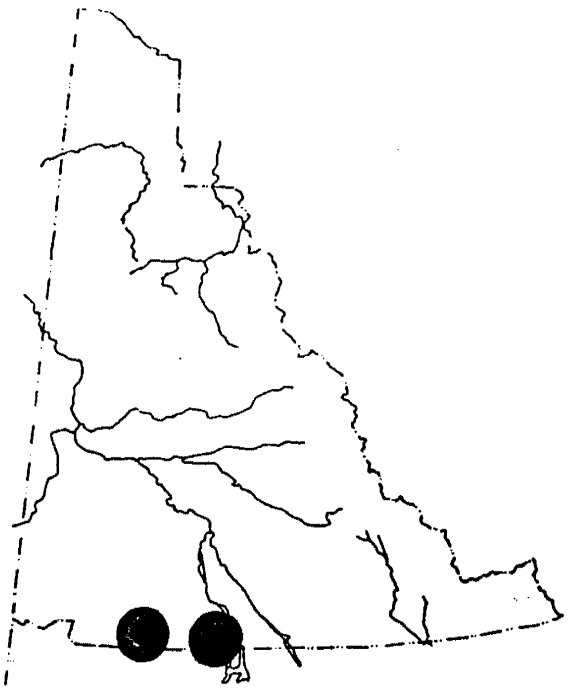
District: Whitehorse

GMZ: 7

Dates of Field Work: June

Operational Budget (YTG): $4 thousand

Cooperators:



Reason for Project:

Mountain goats in GMZ 7 were closed to hunting in 1978 to allow population levels to recover. An assessment of the goat population is needed, both to evaluate the effect of the closure as well as to determine safe harvest levels, so as to again open to limited goat hunting.

Cooperating Agencies:

Progress to Date (Summary of Results):

Goats were counted and classified in GMS 7-8, 7-10, 7-11, 7-12, 7-34 and 7-35 during July 1984.

Current Year Objectives, Plans:

Carry out helicopter surveys in GMS 7-28 and 7-36 to count goats, determine productivity and delineate their distribution.

Publications, Reports:

n/a

Current Year Report Due:

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
The Reintroduction of Mt. goats to Mount White

Project Leader(s): N. Barichello Assistance:

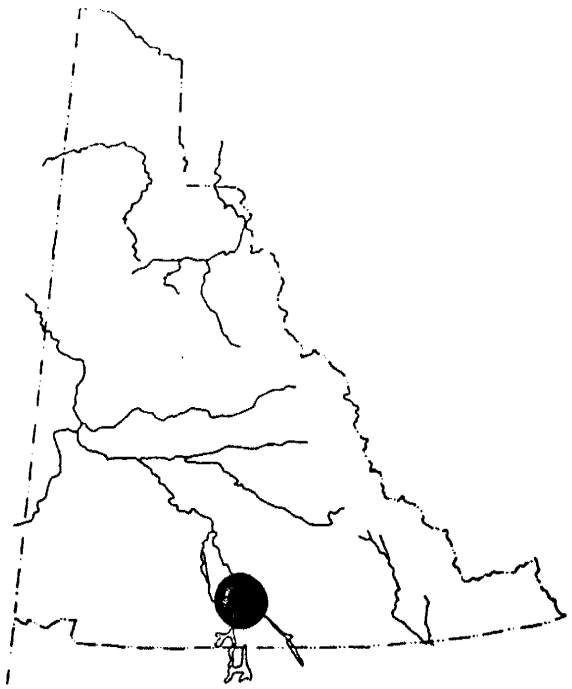
Date Initiated: 1983 Duration: continuing

Location: Mt. White, near Jakes Corner District: Whitehorse

GMZ: 9

Dates of Field Work: Periodic

Operational Budget (YTG): Cooperators:



Reason for Project:

Twelve mt. goats have been relocated to Mt. White near Jakes Corner, with the intention of re-establishing a population of goats to the mountain block. In order to evaluate the success of the re-introduction it is necessary to monitor the survivorship and the reproductive success of the new population. We have a limited amount of historical information, most of it heresay, but no substantial information regarding the carrying capacity of the Mt. White range. The cause of the disappearance of goats is only conjecture. More information is needed to estimate the carrying capacity of the range and potential limiting factors.

Ten goats have been fitted with radio collars providing an ideal opportunity to monitor the fate of the relocated goats as well as to document demographic changes over time, and range use patterns.

Cooperating Agencies:

Progress to Date (Summary of Results):

The 10 goats fitted with radio collars were monitored throughout 1984. All collared goats are currently alive, and are located on Mt. White or the adjacent mountain block.

Current Year Objectives, Plans:

Fixed wing surveys to be carried out, one per month through 1985 and 1986.

Publications, Reports:

Goat transplant to Mt. White (in progress)
Goat relocation to Mt. White

Current Year Report Due: n/a

Final Report Due: March 1986

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
The ecology of Dall Sheep in northern Yukon

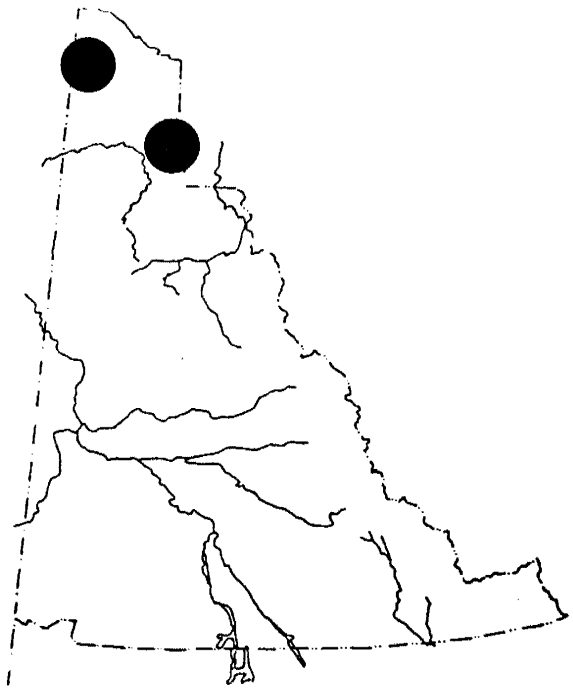
Project Leader(s): N. Barichello
Assistance: Casual Technician

Date Initiated: 1984
Duration: continuing

Location: Northern Richardson and British Mountains
District: Dawson
GMZ: 1

Dates of Field Work: 1 - 15 June, 1985

Operational Budget (YTG):
Cooperators: 42,000 NOGAP



Reason for Project:

As a response to the proposed oil and gas development on the Beaufort Sea and the construction of a haul road from the coast to the Dempster highway, a proposal was made to the Federal government to investigate a northern population of sheep. It has been suggested by biologists in the NWT that sheep in the northern Richardson have seriously declined since early 70's. Sheep numbers are currently unknown, seasonal distribution has not been well established on the Yukon side and the location of movement corridors is unknown.

Cooperating Agencies:
N.W.T. Government
Polar Continental Shelf, N.O.G.A.P.

Progress to Date (Summary of Results):

Initial surveys were carried out during June and July, 1984 during which sheep were counted and classified and their summer range noted. In March 1985, the area was surveyed to determine the winter range of the population. Also at that time, 13 rams were captured and fitted with radio telemetry collars.

Current Year Objectives, Plans:

OBJECTIVES

1. Count and classify the sheep in the northern Yukon, determine their summer distribution to provide estimates of productivity and survivorship.
2. Determine seasonal distribution
3. delineate critical areas
4. delineate movement corridors.

Periodic helicopter surveys will be carried out in conjunction with ground classification counts of the Northern Richardson Mountains and the British Mountains in the northern Yukon, during June, 1985. Fixed-wing telemetry monitoring flights will be carried on periodically throughout the year.

Publications, Reports:

Current Year Report Due: March 31, 1986

Final Report Due:

MOOSE MANAGEMENT

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

Moose Management Program in GMZ 7 & 9

Project Leader(s): Doug Larsen Assistance: R. Markel

Dennison

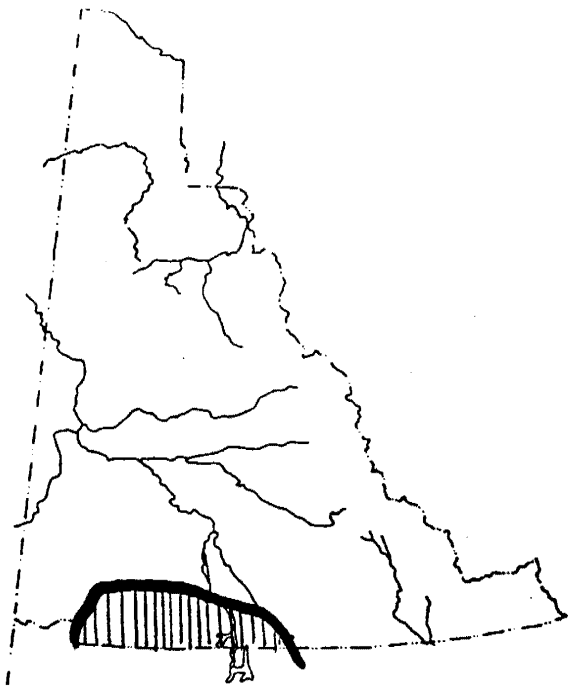
Date Initiated: 1981 Duration: ongoing

Location: Haines Junction to Teslin District: Whitehorse

GMZ: 7 & 9

Dates of Field Work: June, November, March

Operational Budget (YTG): 62. Cooperators:



Reason for Project:

Predation, primarily by grizzly bears, has been identified as the most likely limiting factor on moose populations in S.W. Yukon. Grizzly bears and wolves were identified as the major sources of moose mortality. The most effective test to determine limitation is reduction of the factor(s) suspected of limiting. Wolf populations have been reduced in selected areas while grizzly bears have not been reduced to date. This program will monitor moose calf and adult female survival rates in relation to wolf reduction and in areas where predators have not been reduced.

Cooperating Agencies:

Progress to Date (Summary of Results):

Annual calf mortality rates of 70-90% have been recorded in areas of wolf reduction, as well as, in areas where predators (wolves and grizzly bears) have not been manipulated. Adult moose mortality in wolf reduction areas may be decreasing, however, the data is still preliminary and requires at least one more year of wolf reduction to assess if these changes are significant.

Current Year Objectives, Plans:

1. Determine the rate of calf and adult female natural mortality in S.W. Yukon.

Publications, Reports:

1. Moose inventory in the S.W. Yukon-Alces 18.
2. Study areas 5 and 7 moose surveys 1982 - Y.T.G. files.
3. Population Dynamics and early winter habitat utilization by moose (Alces alces) in the S.W. Yukon Territory - Y.T.G. files.
4. Moose survey results from the S.W. Yukon 1983 - Y.T.G. files
5. Causes, rate and timing of moose (Alces alces) mortality in southern Yukon (in prep.)

Current Year Report Due: April 1986

Final Report Due: -

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Relation between moose survivorship and grizzly predation GMZ 7 & 9

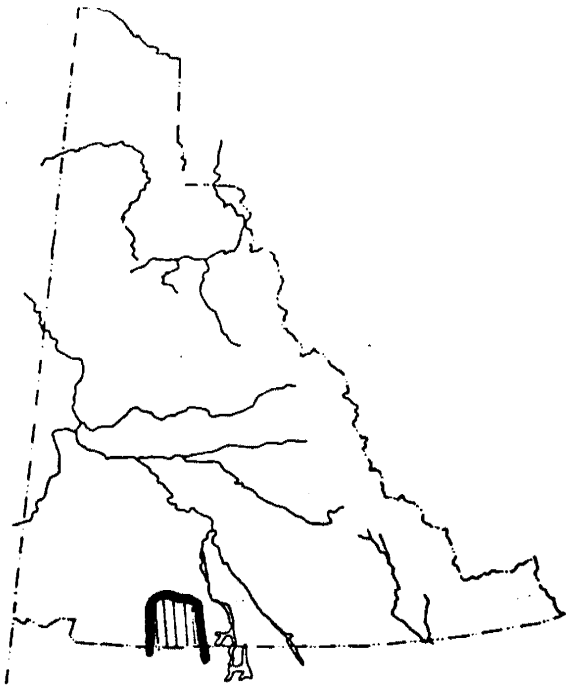
Project Leader(s): Doug Larsen
Assistance: technical staff C.O. & casuals

Date Initiated: April 1985
Duration: Nov. 1985

Location: Rose Lake
District: Whitehorse
GMZ: 7

Dates of Field Work: April - August

Operational Budget (YTG): 226.
Cooperators:



Reason for Project:

Grizzly bears have been identified as the most likely limiting factor on moose populations in the S.W. Yukon. They effect moose populations primarily through predation on neonates such that there is insufficient recruitment to replace adult losses. The most effective test to determine limitation is reduction of the factor(s) suspected to be limiting. In anticipation of future grizzly bear reductions, this program will attempt to fine tune information on bears.

Cooperating Agencies:

Progress to Date (Summary of Results):

n/a

Current Year Objectives, Plans:

1. Determine grizzly bear population size.
2. Radio collar up to 40 bears to ensure that the bear removal target is achieved prior to calving in the year that reduction occurs.
3. Determine what percent of the grizzly bear population exhibits predatory behaviour.
4. Determine what age/sex cohorts of bears exhibit predatory behaviour.
5. Determine the cause and extent of calf mortality during a two month period after parturition.

Publications, Reports:

n/a

Current Year Report Due: April 1986

Final Report Due: ongoing

CARIBOU MANAGEMENT

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Fourth International Reindeer - Caribou Symposium

Project Leader(s): R. Farnell Assistance: M. Hoefs

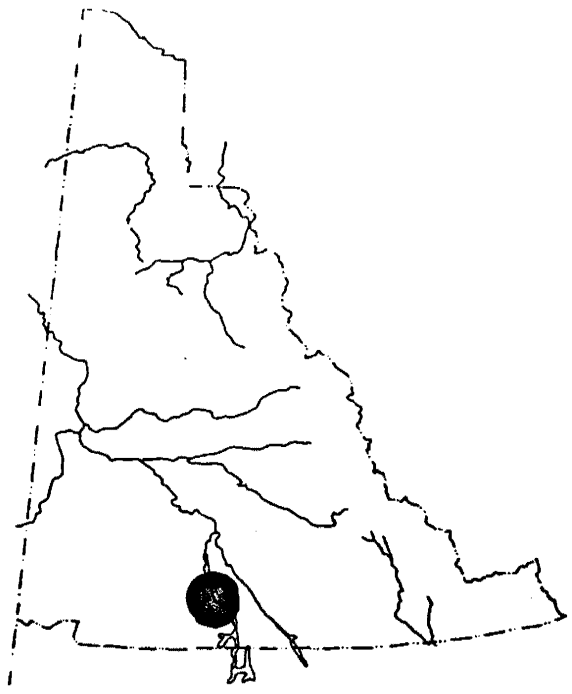
Date Initiated: Duration: 4 days

Location: District: Whitehorse

GMZ:

Dates of Field Work: August 22-25, 1985

Operational Budget (YTG): $12,000.00 Cooperators:



Reason for Project:

To provide local arrangements conference hall, reception and field trips for the symposium in Whitehorse.

Cooperating Agencies:

Canadian Wildlife Service

Progress to Date (Summary of Results):

Planning local arrangements.

Current Year Objectives, Plans:

On August 22 to 25 Whitehorse will host the Fourth International Reindeer-Caribou Symposium.

Publications, Reports:

Proceedings of the Fourth International Reindeer/Caribou Symposium.

Current Year Report Due:

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Inventory of the Wolf Lake and Little Rancheria Caribou Herds.

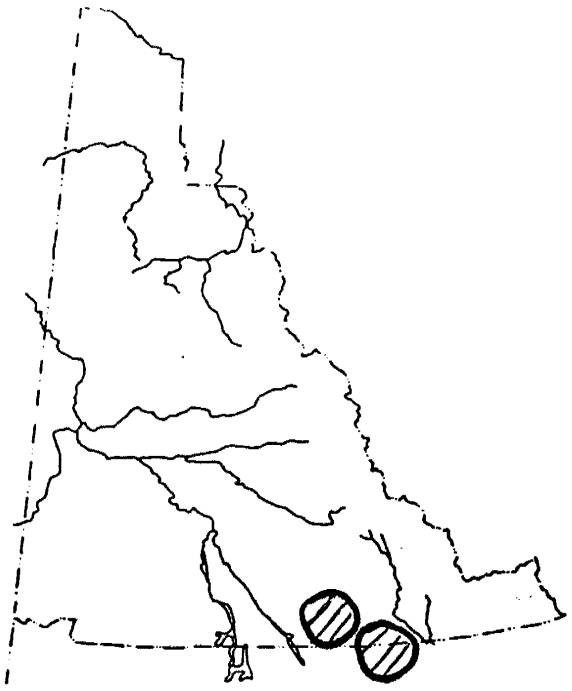
Project Leader(s): R. Farnell Assistance: J. McDonald

Date Initiated: September 1984 Duration: Ongoing

Location: Wolf Lake-Northern Cassiars District: Watson Lake
Liard Basin and Northern B.C. GMZ: 10

Dates of Field Work: June 2, 1985, July 14-18, 1985
September 28, 1985, March 1-10, 1986

Operational Budget (YTG): $39,531.00 Cooperators:



Reason for Project:

Recent land use applications in the range of the Wolf Lake and Rancheria herds combined with extreme overhunting (which may destroy the latter herd) have initiated concern to inventory these two small woodland herds. Radio collaring and subsequent monitoring will identify the range traditions of both herds and lay the ground work for a complete inventory. Composition counts will determine the status of both herds and assist in making management decisions. Range traditions will provide input into planning and decision making for a number of mining activities in the area.

Cooperating Agencies:

Progress to Date (Summary of Results):

Live captured and radio-collared 7 caribou (Wolf Lake Herd) in the Ice Lakes area in Sept. 1984 and subsequently relocated them on their winter range in the vicinity of Wolf Lake. Mapped the winter distribution, collected fecal pellet samples and conducted snow surveys in March 1985. Counted 74 caribou with a cow calf ratio of 14.2.

Live captured and radio-collared 5 caribou (Little Rancheria Herd) in the Liard basin in February 1985. Counted 82 caribou with 20.9 calves per 100 cows. Mapped the winter distribution, collected fecal pellets and conducted snow surveys at stations along the Alaska and Campbell highways.

Current Year Objectives, Plans:

1. Relocate radio-collared caribou of both herds in June to determine the calving distribution and spring migration movements.
2. Relocate the collars in July to determine the summer distribution.
3. Relocate the collars in October to determine the rutting grounds and to conduct a composition count to obtain cow-calf, yearling and sex ratios. Also make a subjective estimate of herd sizes.
4. Capture and radio-collar 7 additional caribou for each herd.
5. Relocate the collars in late winter 1986 to determine the winter range and to conduct a composition count to determine the over-winter calf survivorship. Also collect fecal samples for food habit analysis and conduct snow surveys for a winter severity index.

Publications, Reports:

File Reports:
1. September radio-collaring of Woodland Caribou east of Wolf Lake, Yukon 1984.
2. Late winter distribution and composition of the Wolf Lake Herd March 1985 (in prep.).
3. Late winter distribution and composition of the Little Rancheria Herd February 1985 (in prep.).

Current Year Report Due:

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Ibex Herd Monitoring Project

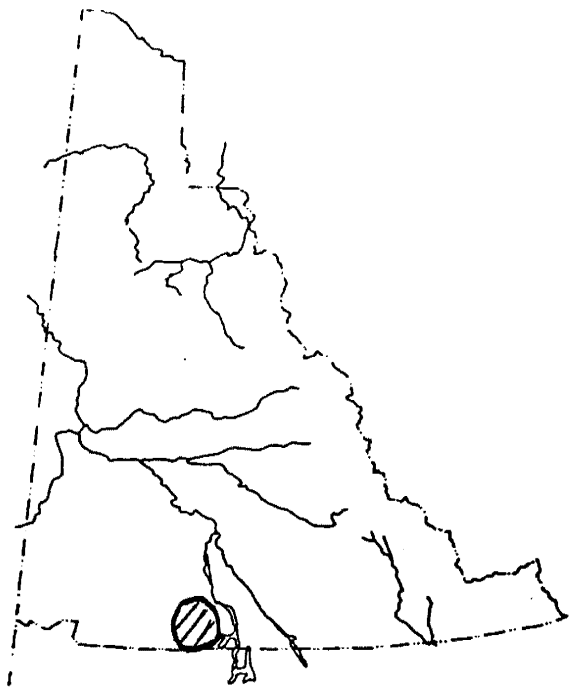
Project Leader(s): R. Farnell
Assistance: J. McDonald

Date Initiated: 1982
Duration: Ongoing

Location: Southwest of Whitehorse
District: Whitehorse
GMZ: 7

Dates of Field Work: October 1985

Operational Budget (YTG): $2,875.00
Cooperators:



Reason for Project:

Initially, the project was to determine the status of the herd and feasibility of a permit fall harvest system. Currently, predator control designed to enhance a moose population is on-going in this study area. The Ibex caribou herd will be monitored to determine a response to the predator control.

Cooperating Agencies:

Progress to Date (Summary of Results):

1984 rut survey counted 97 caribou with 48.6 calves per 100 cows and a high yearling survivorship of 38.4 yearlings per 100 cows.

Current Year Objectives, Plans:

1. Relocate the 5 radio-collared caribou and map the rut distribution and conduct a composition count in October. Also determine a subjective estimate of the herd size.
2. Monitor the success of the permit fall harvest.

Publications, Reports:

File Report: Ibex Caribou Herd Rut Count Oct. 17-18 1984.

Current Year Report Due: November 1985

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Finlayson Caribou Herd Management

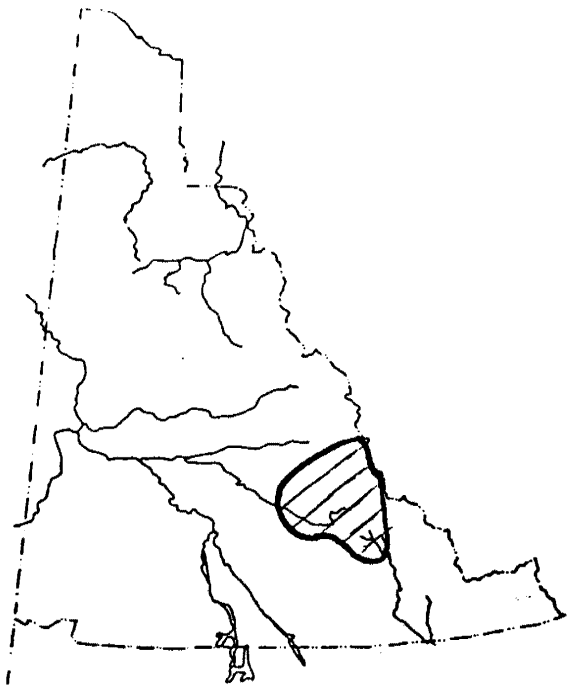
Project Leader(s): R. Farnell
Assistance: J. McDonald
R. Booker

Date Initiated: March 1982
Duration: Ongoing

Location: East-Central Yukon
District: Ross River
GMZ: 10 & 11

Dates of Field Work: March 1-10, May 26-31
July 10-15, Sept. 28-Oct. 10

Operational Budget (YTG): 48, 172
Cooperators:



Reason for Project:

In 1982 the status of the Finlayson Herd of 2,000-2,500 caribou was that of a declining population with poor calf survival to 6 months of age, a high natural mortality rate and an annual hunter harvest exceeding 10% of the herd. A managemenet project was initiated to stabilize and increase the herd to 5,000. A bull only season was introduced, native subsistence hunters cooperated to reduce the winter harvest and a wolf reduction through aerial hunting was carried out. This project will monitor the effects of these management strategies on the Finlayson Caribou Herd.

Cooperating Agencies:

Progress to Date (Summary of Results):

The hunting regulation change decreased the sport hunter harvest in 1984 from 40 caribou to 10 bulls. The cooperative effort by subsistence hunters resulted in a reduction from 200+ animals to approx. an 80 caribou harvest. The adult mortality rate as evidenced by the deaths of radio-collared animals has declined dramatically from 29.4% in 1982 to 18.8% in 1983 to 4.3% in March 1985. The cow calf ratio has increased from 16.5 in Oct. 1983 to 34.0 in Oct. 1984 to 41.9 in Oct. 1984. The overwinter calf survivorship was 35.6 calves/100 cows in March 1985.

Current Year Objectives, Plans:

1. Late winter count (March). Relocate radio-collared caribou and delineate the winter distribution. Conduct a composition count to determine the calf survivorship. Conduct a snow survey along the highway to determine winter severity. Collect caribou fecal pellets for food habitat analyses.
2. Native harvest-estimate: Patrol the highway to monitor the caribou harvest during Easter and spring break. Also document kill sites and hunter activity incidental to operations during the winter.
3. Calving survey (May). Systematic fixed-wing relocations of radio-collared caribou during the peak of calving to document calving areas.
4. Post-calving surveys (July). Systematic fixed-wing relocation of radio-collared caribou followed by a helicopter composition count to determine the initial cow-calf ratios.
5. Rut count and population estimates (Sept.-Oct.). Systematic fixed-wing relocations of radio-collared caribou during the rut followed by helicopter stratification composition counts to determine population size and productivity.
6. Radio-collar mortality rate - retrieve radio collars and determine cause of death.

Publications, Reports:

File reports.

Current Year Report Due: December 1985

Final Report Due:

BEAR MANAGEMENT

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Managing grizzly harvests within outfitting concessions using harvest points.

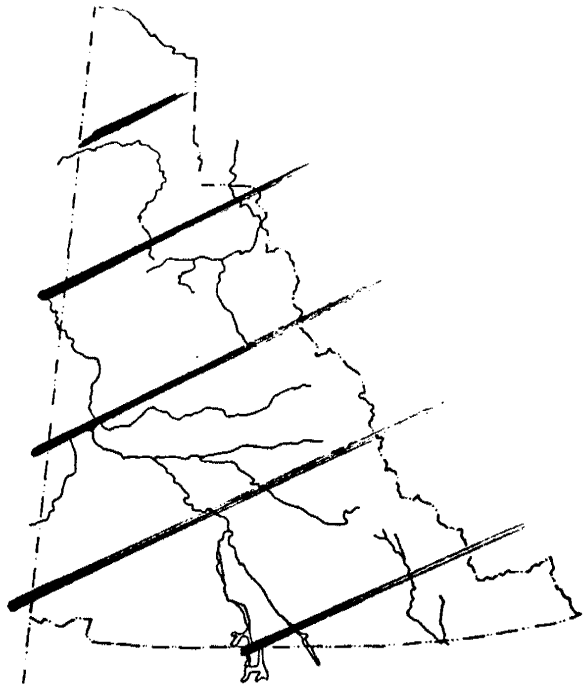
Project Leader(s): B.L. Smith
Assistance: T.M. Fox

Date Initiated: April 1984
Duration: 2 months

Location: Meetings: Whitehorse & Regional Offices
District: All
GMZ: 2,4,5,7,8,9,10,11

Dates of Field Work: (see current year plans)

Operational Budget (YTG): Nil
Cooperators:



Reason for Project:

Management systems should evolve as data quality improves and to meet the changing needs of industry and government.

The harvest point system for the 1985 to 1987 period addresses problems with the earlier quota system and improvements in data quality. The possibility of using outfitter sightings to refine population density estimates will be explored.

Cooperating Agencies:

Yukon Outfitters Association.

Progress to Date (Summary of Results):

System designed, interviews started.

Current Year Objectives, Plans:

This project has 5 phases as follows:

Phase	Completion Date
1. System Design	March 31, 1985
2. Outfitter Interview - discuss pop. estimate and point system and desired legislation.	May 30, 1985
3. Legislation design.	July 15, 1985
4. Guide Awareness - cooperate with YOA in guide training.	Ongoing
5. 2nd. Outfitter Interview - review system, sightings etc.	Winter, 1985/86

Publications, Reports:

Smith, B.L., T.M. Fox and B.O. Pelchat 1985. A system of harvest points to regulate non-resident grizzly harvest in Yukon outfitting concessions.

Current Year Report Due:

Final Report Due: August 1, 1985

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: The status and management of the grizzly bear in Yukon, Canada, 1985.

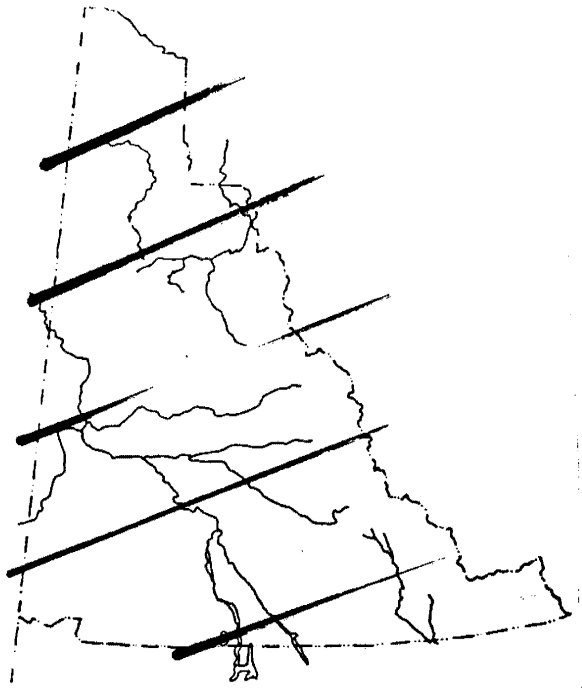
Project Leader(s): B.L. Smith
Assistance: T.M. Fox
Conservation Officers

Date Initiated: 1985
Duration: 1 year

Location: Study: all Yukon
Writeup: Whitehorse
District: N/A
GMZ: N/A

Dates of Field Work: N/A

Operational Budget (YTG): $7k
Cooperators:



Reason for Project:

The status of the grizzly bear in Yukon was reviewed by Dr. A.M. Pearson in 1972 and by G. Lortie in 1977. Improvements in the understanding of northern interior grizzly bear population ecology, increases in harvest data sample sizes and interviews with residents allow the more accurate assessment of population status that is currently required.

Cooperating Agencies:

Progress to Date (Summary of Results):

Potential densities have been estimated and interviews have been initiated.

Current Year Objectives, Plans:

This project has two major facets. The first is an assessment of habitat capability, population biology, potential density and vulnerability patterns in grizzly bears in 20 ecologically distinct areas.

The second is a detailed analysis of harvest data from 1965 to 1985 and interviews with residents to determine present status.

Publications, Reports:

Smith, B.L. and T.M. Fox. 1985. Grizzly bears in Yukon - an ecoregion review of population biology.

Smith, B.L. and T.M. Fox. 1985. Grizzly bears in Yukon - current status and management.

Current Year Report Due:

Final Report Due: March 31, 1986.

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: The population ecology of grizzly bears in the Ogilvie Mtns. and implications to management

Project Leader(s): B.L. Smith Assistance:

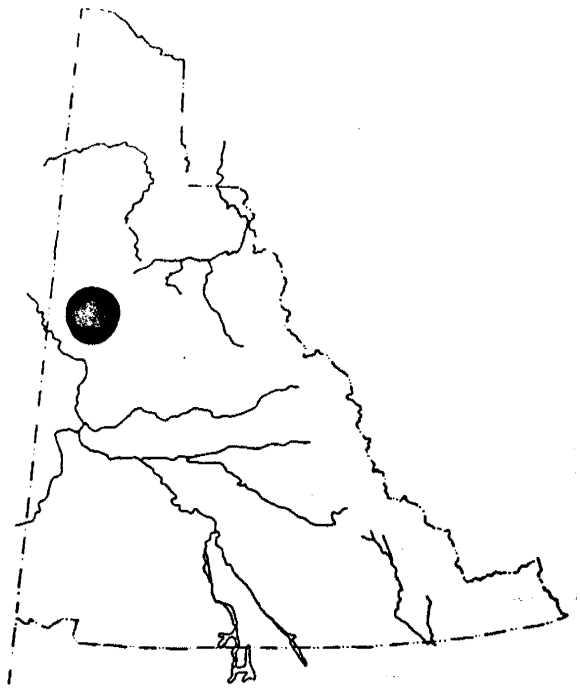
Date Initiated: May, 1979 Duration: 5 spring seasons

Location: Study: 70 mi NW Dawson District: Dawson

Writeup: Whitehorse GMZ: 2

Dates of Field Work: No fieldwork in 1985

Operational Budget (YTG): Cooperators:



Reason for Project:

In the late 1960's and early 1970's large numbers of female grizzly bears were being taken by GMZ 2 hunters, and this was believed to be deleterious to the population. Studies were initiated to determine why females were vulnerable and to determine the population ecology of a representative central Yukon "Mountain" grizzly population.

Cooperating Agencies:

Progress to Date (Summary of Results):

Over the 1979 to 1984 period grizzly bears were captured and monitored, hunting patterns were determined, and facets of population biology were examined. Data are largely tabulated and partially analyzed.

Current Year Objectives, Plans:

Analyses and writeup will be completed.

Publications, Reports:

Smith, B.L. 1985. The population ecology of grizzly bears in the Ogilvie Mtns. and implications to harvest management.

Current Year Report Due:

Final Report Due: February 1, 1986.

FURBEARER MANAGEMENT

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Muskrat harvest and management on Old Crow Flats.

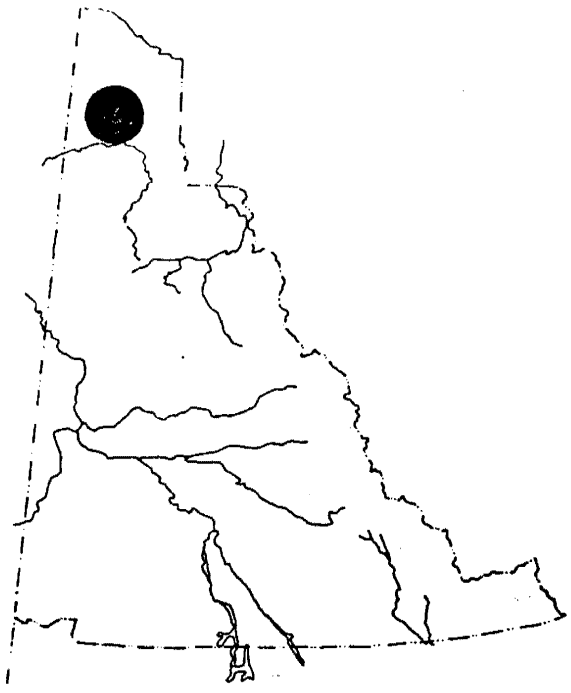
Project Leader(s): Brian Slough, Mark Simpson/ Stan Boutin
Assistance: 2 or 3 contract field assistants (10 man-months)

Date Initiated: 1982
Duration: 5 years

Location: Old Crow Flats
District: Dawson City
GMZ: 1

Dates of Field Work: April through October 1985

Operational Budget (YTG): $20.0 k
Cooperators: $40.0 k



Reason for Project:

The Old Crow muskrat harvest represents 75% of the total Yukon muskrat harvest and is valued at up to $87,000. annually. It is a significant source of income and cultural event for the community of Old Crow. The harvest is at a time of year when winter mortality has already occurred, females are pregnant and pelts are losing primeness. Muskrat inventory techniques have not been developed.

Cooperating Agencies:
Yukon Trappers' Association (Special ARDA grant)
Polar Continental Shelf Project
University of Guelph (National Scientific and Engineering Research Council)

Progress to Date (Summary of Results):

1. Push-up inventories May 1982 and May 1984.
2. Carcass analysis from trapper harvest in 1984.
3. Live-trapping and population estimation from mark-recapture. Capture success was low.

Current Year Objectives, Plans:

1. Ground census of pushups (April - May 1985)
2. Aerial census of pushups (May 1985)
3. Carcass analysis from trapper harvest (April - June 1985)
4. Live trapping muskrats (June, August 1985)
5. Pelt primeness testing (September, October 1985)

Publications, Reports:

Preliminary Investigations of the muskrat population and harvest of Old Crow Flats and Northern Yukon - 1982.

1984 Progress Report

Current Year Report Due: 1985

Final Report Due: 1986

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

Marten Management through attempted population transplant.

Project Leader(s): Brian Slough

Assistance: Casual (6 months)

Date Initiated: 1978

Duration: indefinite

Location: Various locations in southern Yukon

District: Haines Jct, Whitehorse, and Watson Lake

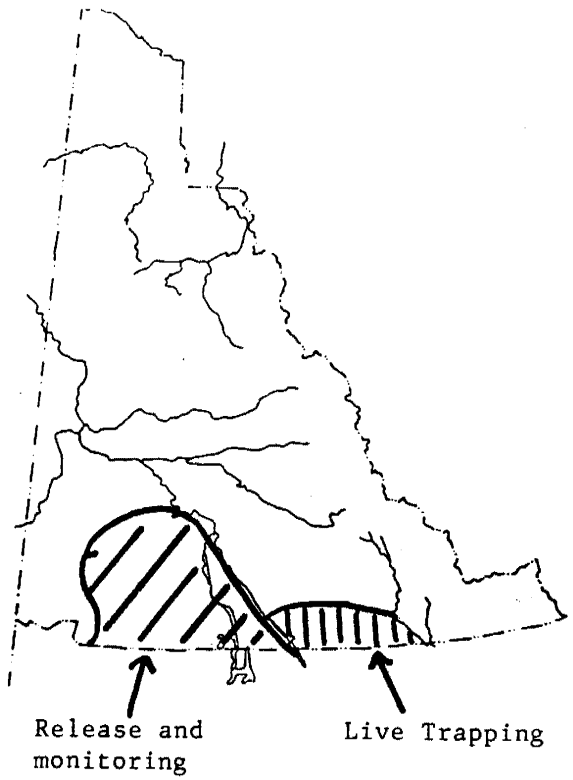
GMZ: 7,8,9,10

Dates of Field Work: Continuous radio monitoring

Live trapping October through March

Operational Budget (YTG): $17.0 k

Cooperators: n/a



Reason for Project:

Marten is a valuable furbearer to Yukon trappers, harvested on a sustainable basis. It is vulnerable to over - harvest and habitat changes. Most trappers underharvest the species, while some harvest near the sustainable limit. In addition, marten are very scarce in a large area of the southern Yukon, indicating a history of fires and overharvesting.

Cooperating Agencies:
n/a

Progress to Date (Summary of Results):

80 marten were reintroduced to vacant habitats in 1984 and 1985. 8 were radio implanted in 1984 and were released in the Takhini Lake and Wheaton River areas. 8 animals were implanted in 1985 and are being monitored in the Ibex area.

Current Year Objectives, Plans:

1. Complete the write-up of Evelyn Creek Marten Study
   - aging techniques
   - habitat, food habits
   - management recommendations.

2. Prepare trapline management brochure for trappers

3. Monitor on-air marten.

4. Introduce additional marten, including 9 implanted individuals.

5. Continue to protect transplants and immigrants with a trapping season closure.

Publications, Reports:

1. Marten transplant progress report (in preparation)

2. Population dynamics of the Pine Marten (Martes americana) in the Yukon Territory.

Current Year Report Due: May 1985

Final Report Due: n/a

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Furbearer Population Monitoring Studies

Project Leader(s): Brian Slough
Assistance: Casual (4 months)

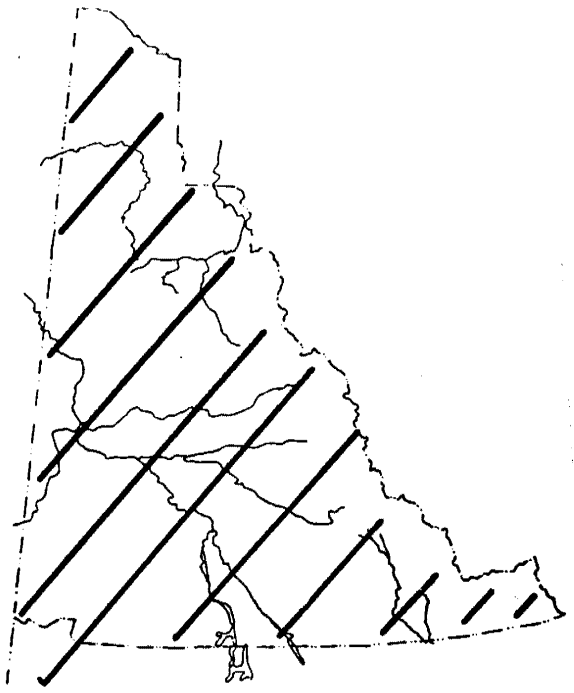
Date Initiated: 1981
Duration: ongoing

Location: Yukon
District: -

GMZ: -

Dates of Field Work: Variable

Operational Budget (YTG): $10.0 k
Cooperators: n/a



Reason for Project:

The status of furbearer populations and the fur resource capability must be known before the management goals of sustained yield and conservation can be realized.

Cooperating Agencies:
n/a

Progress to Date (Summary of Results):

The status of furbearer populations has been monitored by fur harvest data analysis, trapper questionnaire analysis, inventory studies (winter track-counts, beaver cache surveys, muskrat pushups surveys, aerial surveys) and biological monitoring studies including beaver live trapping, beaver pelt analysis, and other separate projects (See Old Crow Muskrat, Wolverine, Marten and Arctic Fox project descriptions).

Current Year Objectives, Plans:

1. Spatial (mapped) analysis of historical fur harvest data by species.
2. Trapper questionnaire analysis including spatial (mapped) analysis of trends and population densities.
3. Winter track survey of priority land planning area (Kusawa), funded by Lands, Parks and Resources Branch.
4. Other track surveys?
5. Biological analysis of lynx pelts taken by Yukon trappers.

Publications, Reports:

1. North Canol-Macmillan Pass furbearer inventory - 1983
2. Yukon River Basin furbearer inventory - 1983
3. Annual trapper questionnaire report 1983, 1984
4. Status of furbearers in Yukon - 1984
5. Track-census reports for Frenchman/Tatchun, Coal River Springs, Southern Lakes and Ibex study areas.
6. Reports from other projects.

Current Year Report Due: -

Final Report Due: -

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

Economic Harvest Potential and Management of Arctic Fox

Project Leader(s): Brian Slough
Cor Smits/Harvey Jessup

Assistance: on aerial surveys only

Date Initiated: 1984

Duration: 2 years

Location: North Slope

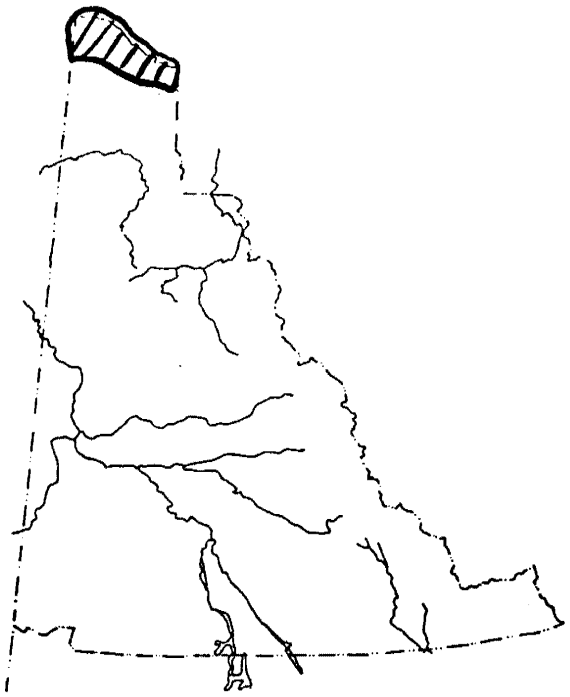
District: Dawson City

GMZ: 1

Dates of Field Work: May through July

Operational Budget (YTG): $0 k

Cooperators: $23.0 k



Reason for Project:

Arctic fox populations, habitat utilization and fur harvest levels are largely unknown in Yukon. This information is needed for land use decisions (impact assessments) and arctic fox management on the north slope.

Cooperating Agencies:

NOGAP

Progress to Date (Summary of Results):

Active and inactive arctic and red fox dens were surveyed in July 1984. Wildlife officers were interviewed in Aklavik and Inuvik, N.W.T. to initiate the fur harvest data acquisition process.

Current Year Objectives, Plans:

Relocate and survey active dens in May 1985.

Determine productivity (pup counts) and food habits (scat analysis) (June - July 1985)

Interview trappers camped on north slope (June 1985) re harvest and harvest potential.

Obtain harvest information from N.W.T. Wildlife Service.

Review literature on arctic fox ecology.

Publications, Reports:

none available

Current Year Report Due: August 1985

Final Report Due: August 1985

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Wolverine Ecology and Behaviour in southern Yukon

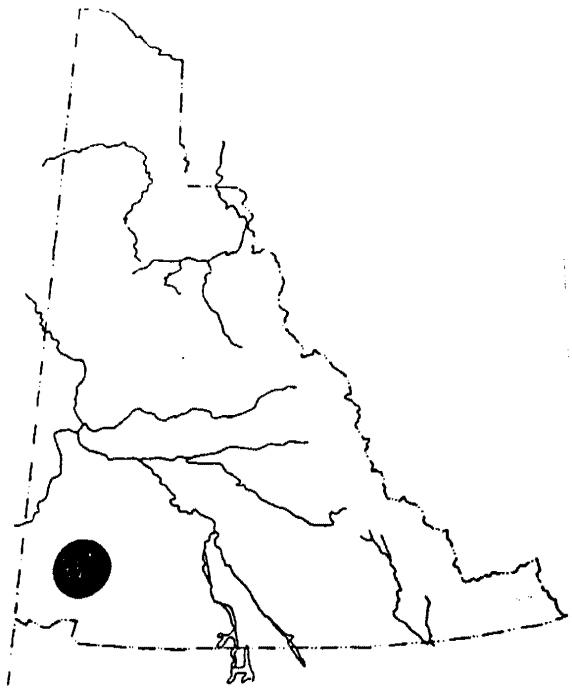
Project Leader(s): Brian Slough Assistance: Casual (2 months)
Vivian Banci, Alton Harestad

Date Initiated: 1982 Duration: 4 years

Location: Kluane Game Sanctuary District: Haines Junction
between Duke and Donjek Rivers GMZ: 6

Dates of Field Work: Continuous radio monitoring
Live trapping complete April 1985

Operational Budget (YTG): $10.0 k Cooperators: $10.0 k



Reason for Project:

The wolverine is rare throughout its' range in Canada. The Yukon Territory contains a significant remnant of the original wolverine habitat once found in Canada. One quarter to one third of all wolverine harvested in Canda are from Yukon. Very little is known of the ecology and behaviour of the wolverine in Yukon. This information is basic to the development of a comprehensive management plan for the species which includes conservation of the species as well as a sustainable harvest by local trappers.

Cooperating Agencies:
Simon Fraser University (National Scientific and Engineering Research Council of Canada),
World Wildlife Fund, D.I.A.N.D.

Progress to Date (Summary of Results):

About 500 wolverine carcasses have been submitted by trappers over the past 3 winters. The carcasses are being sexed, aged and analyzed for productivity, age at maturity and physical condition.
10 wolverine have been live-trapped and monitored since January 1984. Natural and man-caused mortality, and emmigration have reduced the number of "on-air" individuals to 3.
Additional field work includes a collection of scats for food habit analysis and a characterization of the biological and physical components of the wolverine habitat.

Current Year Objectives, Plans:

1. Complete carcass and scat analyses.
2. Monitor radio-collared wolverine at regular intervals.
3. Vivan Banci will prepare a progress report in 1985 and a final report (M. Sc. thesis) in 1986.

Publications, Reports:

1983 and 1984 progress reports.
Wolverine Status Report 1982.

Current Year Report Due: June 1985

Final Report Due: 1986

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Furbearer Management Plans, development and preparation

Project Leader(s): Brian Slough Assistance: _____

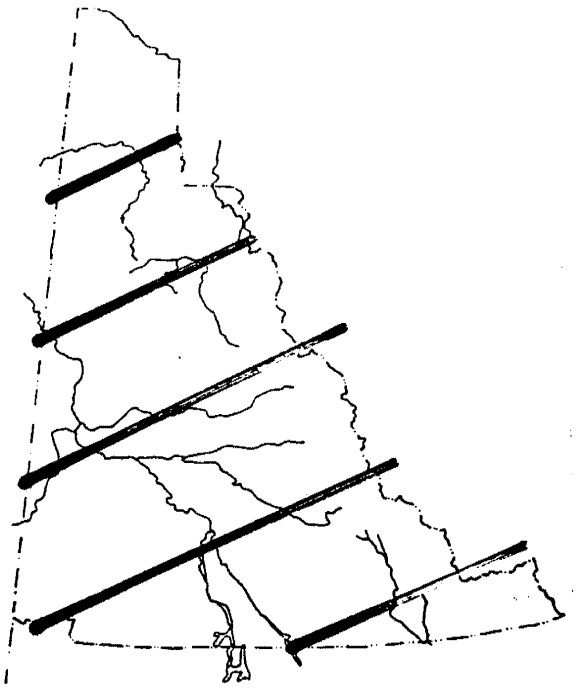
Date Initiated: 1985 Duration: ongoing

Location: n/a District: _____

GMZ: _____

Dates of Field Work: n/a

Operational Budget (YTG): Small Game Travel Cooperators: n/a



Reason for Project:

Management plans are required to facilitate decision making in all aspects of furbearer management from trapline management to legislation.

Cooperating Agencies:

n/a

Progress to Date (Summary of Results):

Data is being collected on the biology, ecology, and harvest of each furbearer species.

Current Year Objectives, Plans:

1. Draft plans for lynx and marten for Y.T.G. policy making and decisions.
2. Prepare trapline management brochures for trappers

Publications, Reports:

Draft Management Plans
1. Lynx
2. Marten

Current Year Report Due: March 1986

Final Report Due: -

FUR HARVEST MANAGEMENT

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Public Information - trapping industry in Yukon

Project Leader(s): Harvey Jessup Assistance: _____

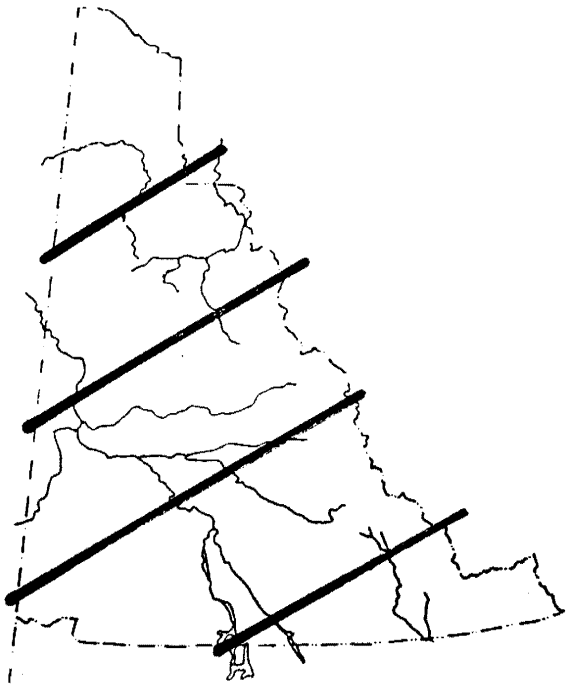
Date Initiated: 1983 Duration: Ongoing

Location: Territory-wide District: _____

GMZ: _____

Dates of Field Work: _____

Operational Budget (YTG): 15.0 Cooperators: _____



Reason for Project:

The fur industry is in jeopardy as a result of public misinformation. There is an urgent need to develop an information program that enlightens residents and tourists alike on the importance of trapping to Yukon's economy, its social and cultural significance and its value in species management.

Cooperating Agencies:
Yukon Trappers Association

Progress to Date (Summary of Results):

1. Six school presentations made during 84/85.
2. Support Junior trapping programs. Develop information package.
3. Develop public information package with YTA.
4. Participate in two talks with tour caravans.

Current Year Objectives, Plans:

1. Finalize public information package.
2. Print information brochure.
3. Promote the development of a local fur industry through E.D.A.
4. Organize school program with Yukon Trappers Association.
5. Jr. trapping.

Publications, Reports:

1. Public information package
2. Jr. trapping information package

Current Year Report Due:

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

Humane Trap Development and Testing Program

Project Leader(s): Harvey Jessup

Assistance:

Date Initiated: 1981

Duration: ongoing

Location: Territory wide

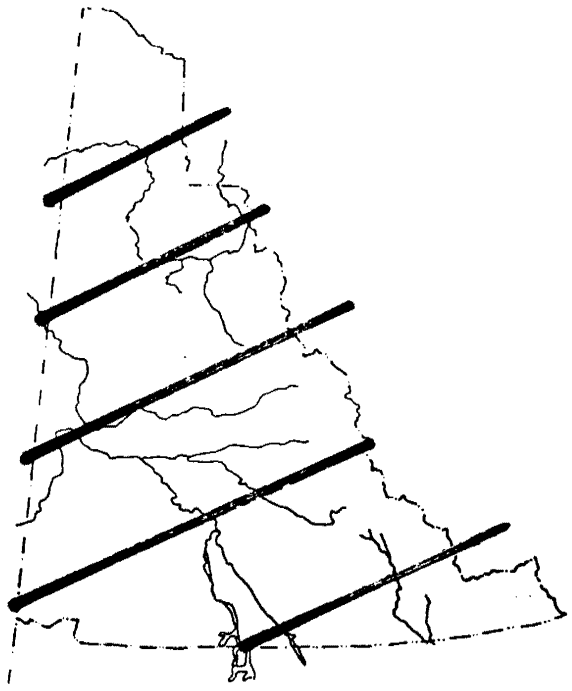
District:

GMZ:

Dates of Field Work: Oct 1 - April 30

Operational Budget (YTG): 3.0

Cooperators: unknown



Reason for Project:

The Fur Institue of Canada has a mandate and a budget to develope and test new trap desins. They will require assistance to field test trap prototypes. The Yukon Territory respresents a wide variety of climatic and geographic classifications and hence, lends itself nicely to a testing environment.

Cooperating Agencies:

Fur Institute of Canada

Progress to Date (Summary of Results):

1. 1 year of testing on 2 trap prototypes. Recommendations to be sent to F.I.C.

Current Year Objectives, Plans:

1. Dependent on directions from F.I.C.
2. Support local trapper with his trap design.

Publications, Reports:

F.I.C. annual reports

Current Year Report Due:

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Fur Institute of Canada

Project Leader(s): Harvey Jessup

Assistance:

Date Initiated: 1983

Duration: ongoing

Location:

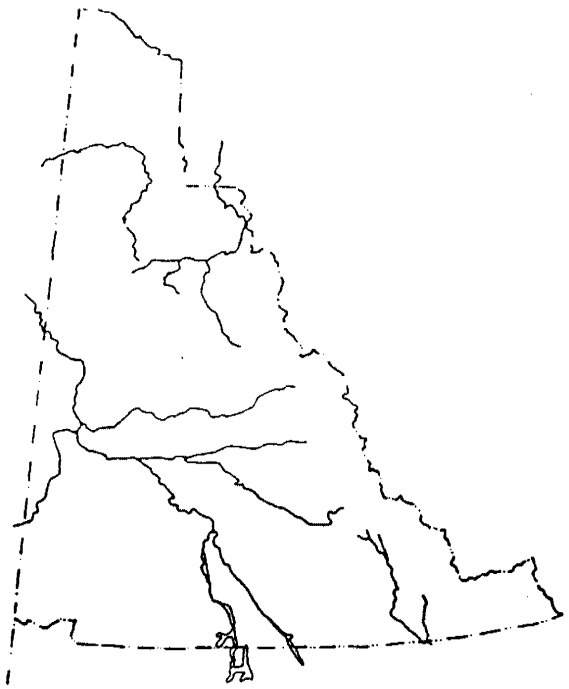
District:

GMZ:

Dates of Field Work:

Operational Budget (YTG): 10.0

Cooperators:



Reason for Project:

The Fur Institute of Canada is a national organization made up of all Canadian governments, industry, trappers and the private sector. It has a mandate to promote and enhance Canada's raw fur industry at home and abroad. Y.T.G. is committed to an annual financial contribution and has representation on the Board of Directors.

Cooperating Agencies:

Progress to Date (Summary of Results):

1. Elected to Board of Directors
2. Nominate and elect CYI to Board of Directors
3. Select 3 working committees a) Humane Trap Development and Testing,b) Public Information and, c) Trapper Education.

Current Year Objectives, Plans:

1. Continue with role on the Board of Directors
2. Conduct trapper profile survey
3. Provide input into the 3 working committees.

Publications, Reports:

Current Year Report Due:

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

Analysis of fur taken by commercial trappers in Yukon 1985-86

Project Leader(s): Harvey Jessup

Assistance: Emily Kotykuk
Karen Mueller

Date Initiated: 1976

Duration: ongoing

Location: Whitehorse

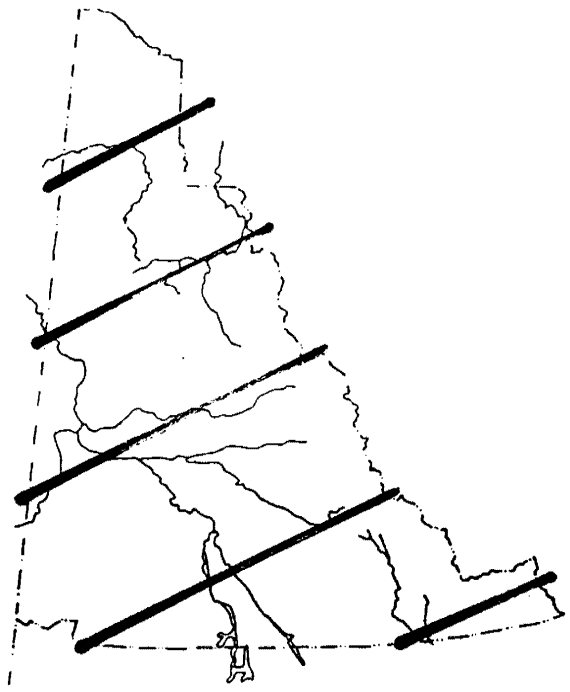
District:

GMZ:

Dates of Field Work: July 1 - June 30

Operational Budget (YTG): 6.0

Cooperators:



Reason for Project:

Population trends, species distribution, harvest pressures, and enforcement problems can be monitored by collecting annual fur harvest data. The computerized inventory program requires continual upgrading as more and more demands are placed on the system.

Cooperating Agencies:

Progress to Date (Summary of Results):

1. Harvest programs.
2. New trappers licences printed.
3. Master file created.
4. Work on new export permit initiated

Current Year Objectives, Plans:

1. Update master file.
2. Produce program 'harvest by district'
3. Create new export permit.
4. Improve declaration system.
5. Establish trapline boundaries in law.
6. Improve communication with N.W.T. and B.C.

Publications, Reports:

Annual Report

Current Year Report Due: Aug. 1/85
Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Trapper Education and community workshops

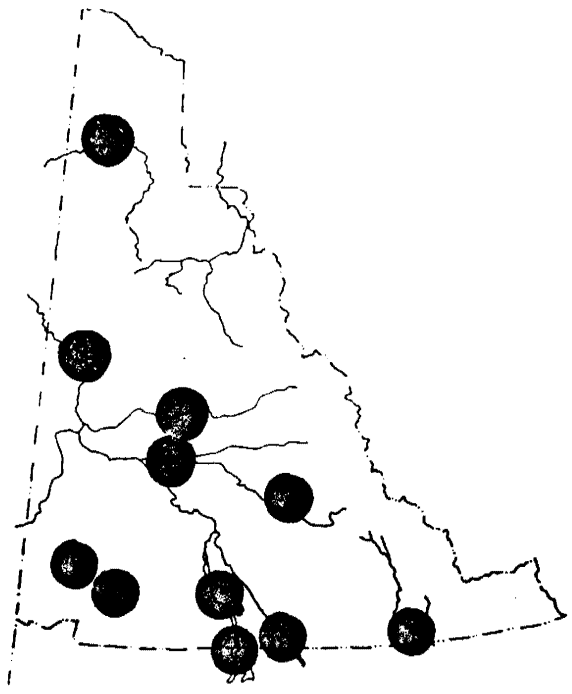
Project Leader(s): Harvey Jessup
Assistance: Yukon Trappers Association

Date Initiated: 1976
Duration: ongoing

Location: Territory wide
District:
GMZ:

Dates of Field Work: Sept. - Mar.

Operational Budget (YTG): 25.0
Cooperators: 5.0



Reason for Project:

Trapper Education is a communication network between government, industry and the user group. It is a necessary tool, used nationally to keep trappers abreast with the latest developments in efficient and humane harvesting methods, species management and proper pelt preparation.

Cooperating Agencies:

Yukon Trapper Association

Progress to Date (Summary of Results):

83/84 - 8 community meetings were conducted
1 intensive 7 day workshop

Current Year Objectives, Plans:

1. Conduct 6 - 4 day workshops throughout Yukon.
2. Conduct wolf harvesting workshop.
3. Conduct 1 intensive 7 day workshop.

Publications, Reports:

Annual Summary and Comments

Current Year Report Due:
Final Report Due:

WOLF MANAGEMENT

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Wolf Population Studies in the Finlayson Management Area

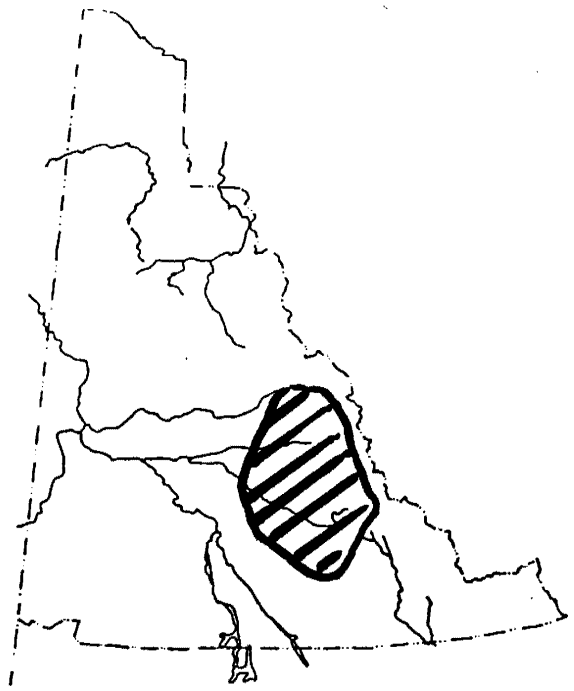
Project Leader(s): R. Hayes, R. Farnell
Assistance: A. Baer

Date Initiated: March 1983
Duration: 3 years

Location: Finlayson Caribou Herd Management Area.
District: Ross River
GMZ: 11

Dates of Field Work: March 1-15, 1986

Operational Budget (YTG): 6.0 T
Cooperators:



Reason for Project:

1) To document and monitor the effects of a > 75% wolf reduction on the resident wolf population.

2) To study the repopulation mechanism that allow wolf populations to recover from overharvest.

3) To assess the effectiveness of intensive annual wolf reduction as a method for reducing annual populations.

Cooperating Agencies:

Progress to Date (Summary of Results):

The annual removed portions of the Finlayson wolf populations have been necropsied and studied since 1983. Removed portions were 50% in 1983, 75% in 1984 and 80-90% in 1985. Population variables including age, sex, productivity, distribution and composition have been annually monitored to document possible trends in wolf population recovery. In 1985, comparative wolf surveys were flown in the study area and Wolf Lake to assess density variations between the two areas, showing a 4 fold decrease in density in the Finlayson wolf reduction area (300 km^2/wolf) compared to Wolf Lake (80 km^2/wolf).

Current Year Objectives, Plans:

Wolf surveys will be carried out in a 5000 km^2 portion of the study area to document distribution and composition of remaining wolves in the area.

Publications, Reports:

Hayes, R.D. and R. Farnell 1985. The Wolf (Canis lupus) population status in the Finlayson Caribou herd management area. Part 2 in R. Hayes 1985. Wolf population research and management studies in Yukon, first progress report 1983. Yukon Wildlife and Fisheries report.

Current Year Report Due: September 1986

Final Report Due: January 1988

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Wolf-Dall's Sheep Relationships in Southern Yukon

Project Leader(s): R. Hayes, N. Barichello
Assistance: R. Sumanik, A. Baer

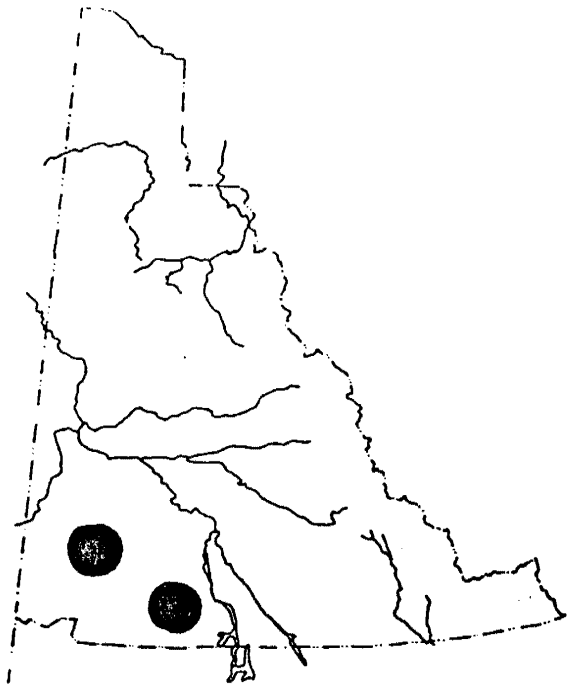
Date Initiated: February 1984
Duration: 3 years

Location: Kluane Game Sanctuary
District: Haines Junction

GMZ:

Dates of Field Work: Jan. 1 - April 1, 1986

Operational Budget (YTG): 10.0 T
Cooperators: 19.0 T (under application)



Reason for Project:

The effects of wolf predation on sheep demography, behaviour and distribution are currently unknown. 1984 wolf studies in GMZ 7 showed significant predation on Dall's sheep, and the presence of wolf reduction in the area provides an ideal experimental situation to study sheep population responses to reduced wolf densities. Sheep populations in a wolf reduction area (Primrose Mountain Block - GMZ 7) and non-reduction area (Kluane Game Sanctuary) will be compared to identify effects of wolf predation on recruitment and mortality rates.

Cooperating Agencies:

1) Foundation for North American Wild Sheep.

2) Michigan Technological University

Progress to Date (Summary of Results):

The wolf-sheep study area was successfully moved from GMZ 7 to the Kluane Game Sanctuary where 5 wolf packs were radio-instrumented between January and April 1985. Daily monitoring of these packs confirmed that sheep were the most important prey of wolves in the area. 9 sheep kills were observed during the study period, the majority being young and middle-aged rams. Sheep population in GMZ 7 study block were surveyed in spring 1984.

Current Year Objectives, Plans:

Sheep populations will be surveyed in the Primrose block and Kluane Game Sanctuary in summer 1985.

R. Sumanik, field studies leader in the Game Sanctuary studies, will continue monitoring wolf predation relationships as part of his Master's thesis. The projected study period is January to April 1986.

Prey collections will be made at Game Sanctuary den sites in August 1985, to determine summer food habits of residential wolves in the study area.

Publications, Reports:

Hayes, R.D., N. Barichello, R. Sumnaik, H. McLeod and A. Baer, 1984. Wolf-Dall's sheep relationships in the Southern Yukon, Yukon Wildlife and Fisheries Branch. Report.

Current Year Report Due: August 1985

Final Report Due: January 1987

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Wolf Population Studies, GMZ 7 and 9

Project Leader(s): R. Hayes
A. Baer

Assistance:

Date Initiated: January, 1983

Duration: 6 years

Location: Southwest Yukon

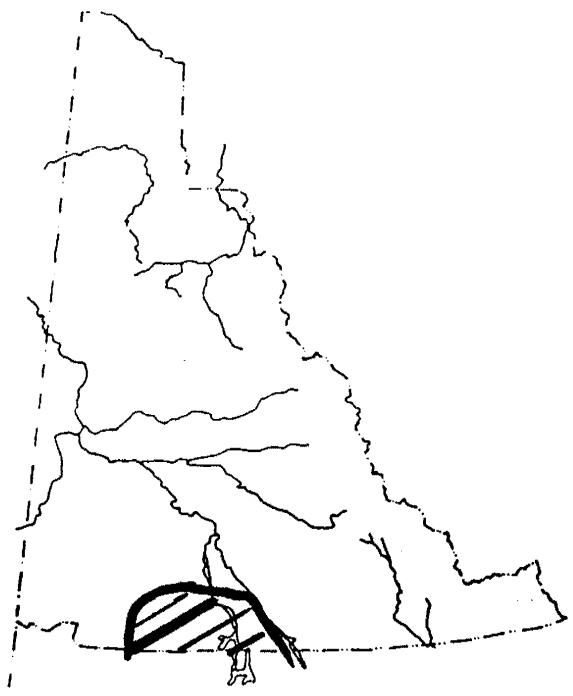
District: Whitehorse/Haines Jct.

GMZ: 7 and 9:01-9:06

Dates of Field Work: Nov. 1, 1985 - April 1, 1986

Operational Budget (YTG): 88.0 T

Cooperators:



Reason for Project:

In response to reduced moose populations and low moose/wolf ratios, wolf numbers in southwest Yukon were scheduled for reduction beginning in March 1984.

Prior to and during this reduction phase, the project was developed in order to document and monitor wolf population reductions and subsequent wolf repopulation responses.

Cooperating Agencies:

Progress to Date (Summary of Results):

Using radio-telemetry techniques and government aerial hunting, a 75% wolf reduction was achieved in GMZ 7 and GMZ 9:01-9:06. Certain collared adult male wolves and females were not killed to study the effects of various reduction techniques including the removal of all pack members, and the maintenance of adult pairs and single adult males.

Current Year Objectives, Plans:

1. To continue to study the ecological relationships of wolves and ungulate prey during the wolf reduction phase.
2. To maintain a 75% wolf reduction in 1985-86.
3. To assess the effects of various wolf reduction strategies on wolf populations and predatory relationships.
4. To study the mechanisms wolves have evolved to repopulate areas following reductions.

Publications, Reports:

Hayes, R.D., P. Merchant and A. Baer, 1985. Wolf population research and management studies in the Yukon, First progress report 1983. Part I. Southwestern Yukon.

Current Year Report Due: August 1985

Final Report Due: 1989

BIRD MANAGEMENT

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Upland game bird annual census and harvest analysis.

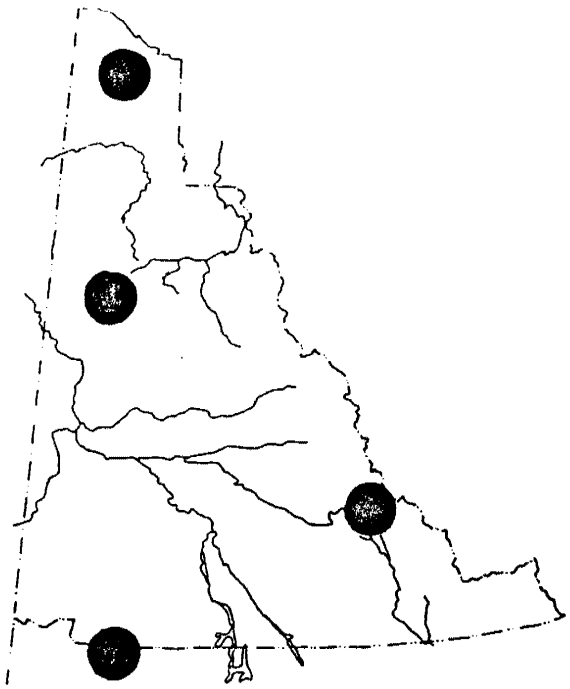
Project Leader(s): Dave Mossop
Assistance: District C.O.'s

Date Initiated: 1973
Duration: Continuing

Location: Chilkoot Pass, Dempster Hwy.
Tungsten, N. Slope
District: Haines Jct., Watson Lk. Dawson, N. Coast
GMZ: 6, 10, 2, 1

Dates of Field Work: April 25 - May 12

Operational Budget (YTG): $1.5 th.
Cooperators: Nil



Reason for Project:

Upland game birds provide a major source of hunter recreational opportunity. Trends and density from representative populations are required to monitor the effectiveness of present policies as well as to supply input to management of species dependent on grouse as a food base. There is evidence that the sharp-tailed grouse, a highly attractive but vulnerable game bird has been declining.

Cooperating Agencies:

Progress to Date (Summary of Results):

Yukon ptarmigan populations have demonstrated strong cyclic trends with populations from various locations basically in synchrony. Populations in the south fluctuate less abruptly than those in the far north. Grouse numbers in 1985 should generally be higher than in past few year. Next peak abundance is expected in 1988-89. Sharp tailed grouse show signs of recovering along with other grouse although numbers were exceptionally low in the last few years Hunter harvest remains relatively low and shows signs of increasing. 4,412 grouse were taken in 1983 hunt.

Current Year Objectives, Plans:

1. To measure the density of 4 reference populations of Willow ptarmigan.
2. To monitor age composition of wintering willow ptarmigan.
3. To monitor sharp-tailed grouse attendance at two dancing grounds in the Donjek River population.
4. To summarize harvest data 1978-1984.

Three ptarmigan counts will be carried out by total ground search using becking calls and a pointing dog. A two km^2 area will be searched in the Chilkat Pass; the N. Fork Pass on the Dempster Highway and the Cantung Highway in the MacKenzie Mountains. A fourth count will be done by helicopter transect on the N. Slope. A late winter sample of willow ptarmigan will be taken from the Ogilvie population to determine age structure of the population.

Two sharp-tailed grouse leks equipped with permanent observation blinds will be visited and attending males counted. Incidental observations of movements and habitat use will be made.

Depending on availability from the Y.T.G. computerized data file, a collation of harvest data will be made and reported by game management subzone.

Publications, Reports:

1982-83 Resident Hunter Questionnire Analysis - game birds.

Current Year Report Due: December 1985

Final Report Due: N/A

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Dempster Corridor Wildlife Interpretive Project

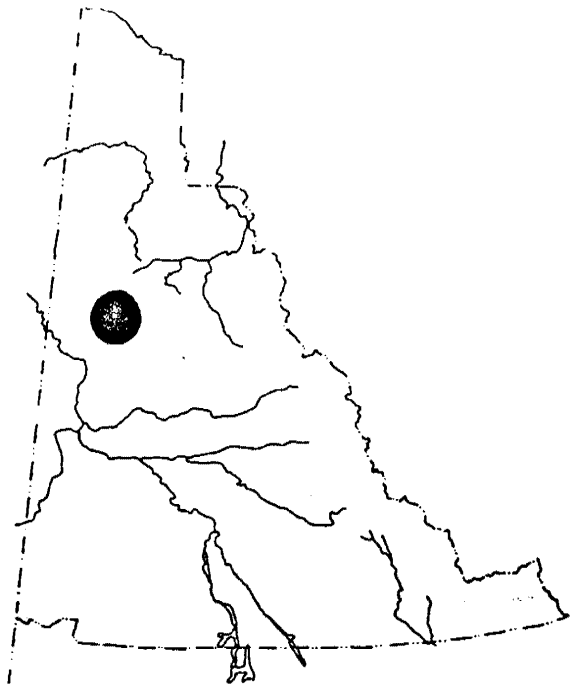
Project Leader(s): Dave Mossop
Assistance: Casual Technician
John Russell

Date Initiated: 1983
Duration: continuing

Location: Dempster Highway km. 60 -240
District: Dawson
GMZ: 2 - 1

Dates of Field Work: June 10 - Aug 31

Operational Budget (YTG): $8.0 th
Cooperators:



Reason for Project:

The Dempster corridor has been completely surveyed for nesting birds of prey. An inordinate density of rare birds was identified. These birds have a very high value as interpretive opportunity for tourists. The birds are likely to disappear from the corridor unless specialized management is in place to protect them and their habitat.

Cooperating Agencies:

Progress to Date (Summary of Results):

Two years of initial interpretation and questionnaire approach to visitor anticipation have been completed. 90 -100% of visitors express interest in seeing wildlife. Most visitors require some sort of assistance in seeing and understanding wildlife and ecological phenomenon. Experiments with conducted hikes have been very successful. Large mammals have proved the largest attraction to the average visitor and interests have ranged widely from insects to plants.

Current Year Objectives, Plans:

1. To continue pilot interpretive project in the corridor.

2. To continue specialized management to enhance and stabalize viewing opportunity particularly of rarer birds of prey.

3. To provide protective surveillance for nesting raptors.

4. To design interpretive material, displays, signs.

A casual technician will be assigned to the project throughout the summer months to carry out continuous field coverage. In 1983-84 focus was on assessing public interest and potential. In the current year a questionnaire will continue to interview tourists about anticipation. Experimental nesting structures will be deployed for small owls and great gray owls. One gyrfalcon aerie will be improved. Constant surveillance of human activity will be carried out near all vulnerable nesting sites.
An interpretive center will be designed to house seasonal interpretive staff in the corridor. It will serve as a focus for visitors to obtain material and to meet with interpretive personnel. Displays will be designed and format for signs and interpretive trails will be developed. The program will begin to expand to cover all aspects of wildlife viewing opportunity.

Publications, Reports:

Mossop, D. and R. Hayes. 1978. Birds of Prey and the Dempster Transportation Corridor. Y.T.G. Report.

Guenter, K. and D. Mossop. 1983. Interpretive potential of Wildlife in the Dempster Highway Development ARea.

Pangman J. and D. Mossop 1984. Interpretive potential of wildlife in the Dempster Corridor. Y. Dept. of REnewable Resources Report

Current Year Report Due: December 31, 1985

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

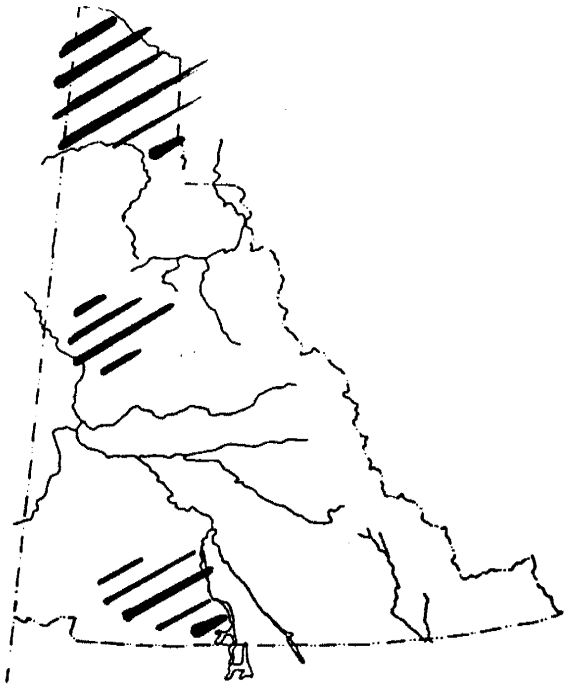
Title: Gyrfalcon Management - harvest, captive breeding, population research, protective surveillance.

Project Leader(s): D. Mossop, N. Barichello
Assistance: J. Russell, K. Gustafson, D. Drummond
Date Initiated: 1981
Duration: Continuing

Location: N. Slope: Ogilvie Mtns., S. Lakes
District: Old Crow, Dawson, Whitehorse
GMZ: 1, 7, 2

Dates of Field Work: May 3, June 10-15

Operational Budget (YTG): (nil)
Cooperators: $10 th.



Reason for Project:

Gyrfalcons are a vulnerable northern species with an extremely high market value. Pressures on their populations from a variety of sources must be addressed in management planning. This project addresses a variety of aspects and is translating information gained into functioning management practices including harvest, private breeding, population research and realistic enforcement protection.

Cooperating Agencies:

Polar Continental Shelf

Progress to Date (Summary of Results):

Background research into management criteria and options is well advanced in the areas of (a) harvest from the wild and (b) private captive production. Yukon is currently acting on this information to develop long term policy. Population research has advanced adequately in the area of inventory and basic research into productivity parameters is currently being written for publications.

Current Year Objectives, Plans:

(1) Produce management policy guidelines and opportunities for the harvest/export of gyrfalcons.

(2) To monitor and assist in the private captive production of gyrfalcons for market values.

(3) To produce published accounts of research conducted by UBC researcher in Ogilvie Mtn. study.

(4) To continue surveillance of nest sites as required to document and curtail illegal activity.

The gyrfalcon management project is in a year of re-evaluations pending the adoption of long-term policy of YTG. Field work will occur only in conjunction with other ongoing projects or as a result of committments to external funding sources.

Publications, Reports:

Annual reports 1981-84

Current Year Report Due: December 31, 1983

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

Peregrine Falcon Recovery Project

Project Leader(s): D. Mossop

Assistance: casual technician

J. Russell, A. Baer

Date Initiated: 1978

Duration: continuing

Location: Yukon River Valley, Yukon North Slope

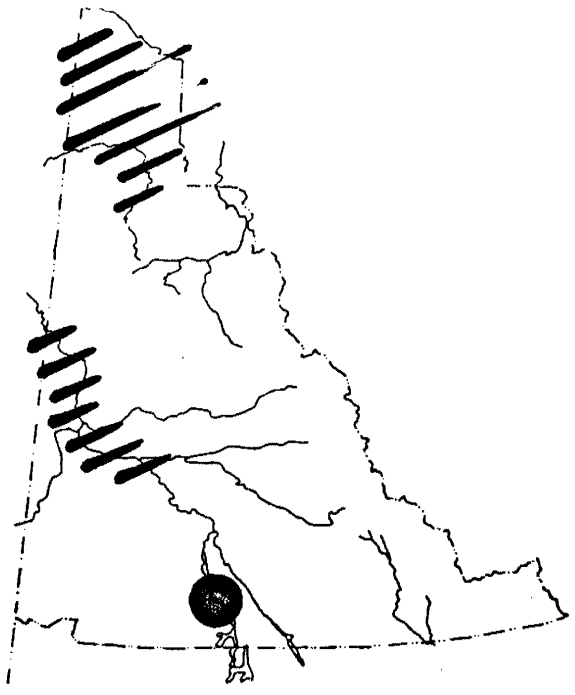
District: Dawson/Old Crow

GMZ: 1, 2, 3

Dates of Field Work: June 1 - Aug 10

Operational Budget (YTG): $8.0th

Cooperators: $15. th.



Reason for Project:

The peregrine falcon is an endangered species in Canada. It disappeared from most of its former range in the 1960's. A small remnant population remained in Yukon. Since 1978 the population of the Yukon River (the interior race of peregrine) has been closely monitored and productivity has been supplemented with captive bred young. The population has now recovered and continues to expand into vacated habitat. On the arctic coast recovery has not occurred, captive breeding efforts continue at Whitehorse (the arctic race of peregrine) to effect reintroduction.

Cooperating Agencies:

Polar Continental Shelf

Progress to Date (Summary of Results):

The Yukon River population has now recovered in sections of the system to pre-decline levels. In excess of 40 young are being produced annually. This project has documented the recovery in detail, providing some of the better North American data on understanding the reasons for the decline. Band returns are beginning to reveal migrational patterns, a vital link in the birds total ecology. The Arctic peregrine has meanwhile disappeared from the Yukon completely. Eleven young have been cross-fostered by gyrfalcons successfully.

Current Year Objectives, Plans:

(1) To carry out low-intensity monitoring of breeding numbers, productivity and human activity in the Yukon River.
(2) To successfully raise 10 young at the Whitehorse breeding facility.
(3) Carry out cross-fostering on the Yukon North Slope in order to release all young produced.
(4) To continue gathering information on the prey base used by Yukon peregrine populations.
(5) To monitor productivity in a sample of the Peel River peregrine population and band all young known to be produced in 1985.

Publications, Reports:

Annual reports since 1978.
1980 H.A. Peregrine falcon survey (Yukon Section).
Mossop, D. Campeau, R. & T. Hayes 1983. Peregrine falcon recovery project. Y.T.G. Report. Dept. of Ren. Res.
Mossop, D. & T. Munson. 1984. Peregrine Falcon REcovery project. Yukon Dept. Ren. Res. Whse.

Current Year Report Due:

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:

Wetland assessment and development of Yukon waterfowl management plan

Project Leader(s): D. Mossop

Assistance: district C.O.'s

Date Initiated:

Duration: continuing

Location: Ross River, Carmacks, Nisutlin Delta

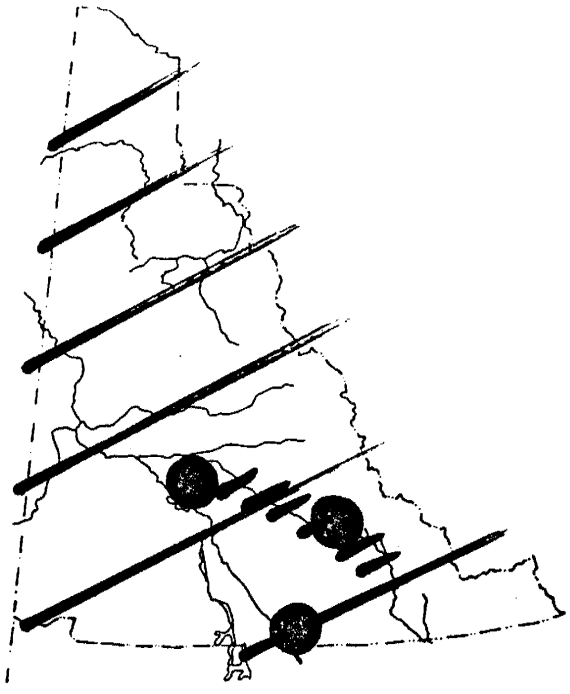
District: Ross River, Mayo, Whitehorse

GMZ: 4,10,11

Dates of Field Work: May 30, June 25-30, Aug 5-7
Dept. 16-30

Operational Budget (YTG): $3. th

Cooperators: $8-10 th



Reason for Project:

Project is a cooperative effort of the Yukon Waterfowl Technical Committee (CWS/YTG Renewable Resources) with Ducks Unlimited, Canada to address data needs and management requirements for waterfowl in Yukon. Initial inventory of wetlands must be followed up by basic analysis of bird use, habitat use and identification of critical components of the systems which may be capable of management effort.

Cooperating Agencies:

Canadian Wildlife Service
Ducks Unlimited (Canada)
Yukon Fish and Game Association

Progress to Date (Summary of Results):

Initial inventory of wetlands important to waterfowl in Yukon has identified 40 key areas. A preliminary draft of a waterfowl management plan for Yukon has been prepared. In 1984 a wetland management agreement was signed between Ducks Unlimited (Can.) and Y.T.G. committing $2.2 m of D.U. funding to Yukon wetland management. Several wetlands (Old Crow Flats, Nisutlin Delta, Sheldon Lakes, Nordenskjold Valley) have been subjected to detailed analysis.

Current Year Objectives, Plans:

(1) To continue extensive wetland inventory
(2) To determine waterfowl use of by areas, concentrating on site detailed in D.U. agreement, and those which are candidates for inclussion. (Needle Rock Marshes, Wetlands of Upper Tintina Trench)
(3) Co-operate in establisment of D.U. program in Yukon as required.
(4) Redraft Yukon waterfowl management plan

Concentration of field effort will be on Needle rock marshes, the upper Tintina trench and Nisutlin delta. The needlerock project is a co-operative 3 agency effort to assess waterfowl use throughout the open water season. The other two are primarily fall staging studies with the Nisutlin effort concentrating on capturing and banding Canada geese.

Publications, Reports:

Mossop, D. and T. Coleman 1984. Factors affecting the fall staging of waterfowl at the Nisutlin Delta, Yukon. Dept. of Ren. Res. Gov't of Yukon. A Yukon River Basin Project report.

Yukon/Ducks Unlimited (Can) 1984. Yukon 10-year Wetlands Agreement

Current Year Report Due: December 1985

Final Report Due:

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: North Slope Raptor Population Inventory & Management Planning

Project Leader(s): D. Mossop Assistance: A. Baer

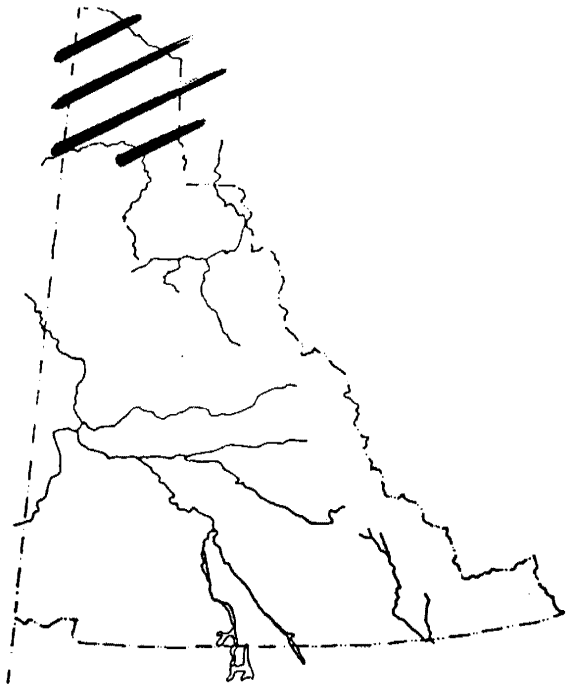
Date Initiated: 1983 Duration: 1987

Location: Yukon North Slope District: Dawson/Old Crow

GMZ: 1

Dates of Field Work: June 25 - July 15

Operational Budget (YTG): Nil Cooperators: $16 th



Reason for Project:

Petroleum industry developments on Yukon's north coast has accelerated the need to develop and implement management plans for wildlife populations in the region. The birds of prey of the north slope are relatively well known; this project is designed to finish inventory and devise management strategies flexible enough to meet most eventualities.

Cooperating Agencies:

N.O.G.A.P. (Government of Canada)

Progress to Date (Summary of Results):

Almost 80% of the Yukon's north slope has been inventoried. This has led to the identification of a large population of gyrfalcons (approx. 100 pairs; density at 1 pr./170 km^2). A very dense golden eagle population has been identified along with rough-legged hawks and other less common raptors. Problems such as the disappearance of the peregrine falcon in the area has also been documented. This initial work can now be effectively worked into ongoing management for the area.

Current Year Objectives, Plans:

(1) Complete inventory of large falcons and other raptors.

(2) Measure productivity of sample of 30 nest sites of various species and determine habitat use parameters.

(3) Draft initial management plan for N. Slope raptors.

Two field trips are planned. The first in late June-early July will complete inventory and check occupancy of the monitored sample of gyrfalcon nests. A survey of snowy owls nesting on Herschel Island will be conducted at that time. A later survey will determine productivity of both gyrfalcons and golden eagles. Food habits samples will be taken. Analysis of productivity data will be conducted along with food habits information at Whitehorse in fall and an interim report prepared.

Publications, Reports:

Mossop, D. 1980. N.A. peregrine falcon survey. Yukon segment (in press.).

Mossop, D., K. Guenter, R. Hayes, 1984. Raptor population inventory and management planning (N. Slope) Renewable Resources (Interim report).

Current Year Report Due: December 31, 1985

Final Report Due: 1987

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Inventory and management plans for bird communities of Herschel Island

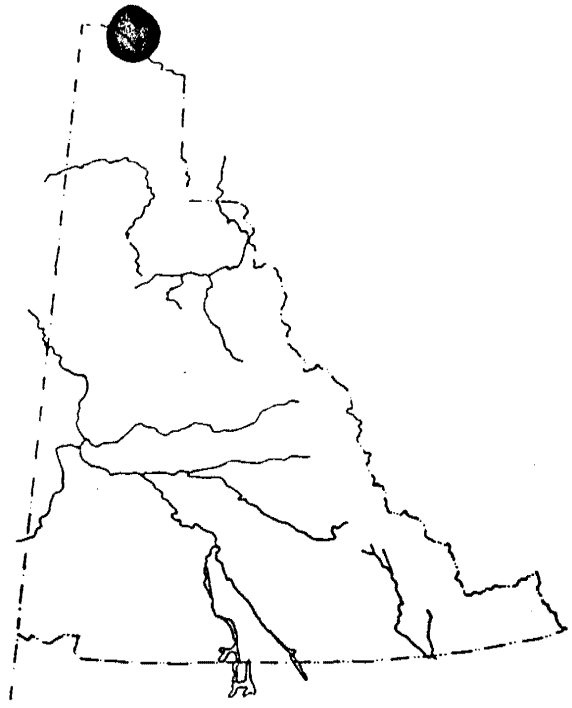
Project Leader(s): D. Mossop
Assistance: Richard Ward

Date Initiated: 1985
Duration: 3 years

Location: Herschel Island
District: Old Crow
GMZ: 1

Dates of Field Work: June 15 - August 31 (approx)

Operational Budget (YTG): $3 th
Cooperators: $10 th



Reason for Project:
In support of planning for the establishment of a Yukon Territorial Park on Herschel Island, the bird fauna must be taken into account. Inventory of species occurring and an initial analysis of their habitat use is necessary for the planning exercise along with the identification and mitigation of potential conflicts with the use of the area as a park.

Cooperating Agencies:

Progress to Date (Summary of Results):

An initial year of inventory has resulted in the identification of 48 species using the island. Significant avian phenomenon with interpretive potential for visitors were identified and four areas where further work and mitigation management will be required were identified.

Current Year Objectives, Plans:

A field technician will spend the breeding season on the island supported by minimal helicopter support and a boat throughout the ice free period. Ground transects will be conducted in various vegetation zones of the island; the bird communities will be described and quantified. Attention will focus on special bird features identified: (a) the black guillemot colony at the townsite (b) nesting rough-legged hawks (c) the staging and moulting of sea ducks, and (d) the nesting ecology of snowy owls.

Objectives will presume these themes and in general add to knowledge of avian fauna of island.

1. Continue bird inventory.
2. Experiment with artificial guillemot nesting structures.
3. Monitor Rough-legged hawk nesting success in relation to human disturbance.
4. Measure bird use of various life zones by transect plot sampling.
5. Monitor members behavior and habitat use of staging sea ducks.

Publications, Reports:

Hawkings T & D. Mossop 1984. An avifaunal survey of Herschel Island 25 June - 17 July 1984. Interum report. Department of Renewable Resources, Yukon.

Current Year Report Due: December 1985

Final Report Due: 1987

SPECIAL STUDIES

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Sheep Winter Range Improvement through prescribed burning

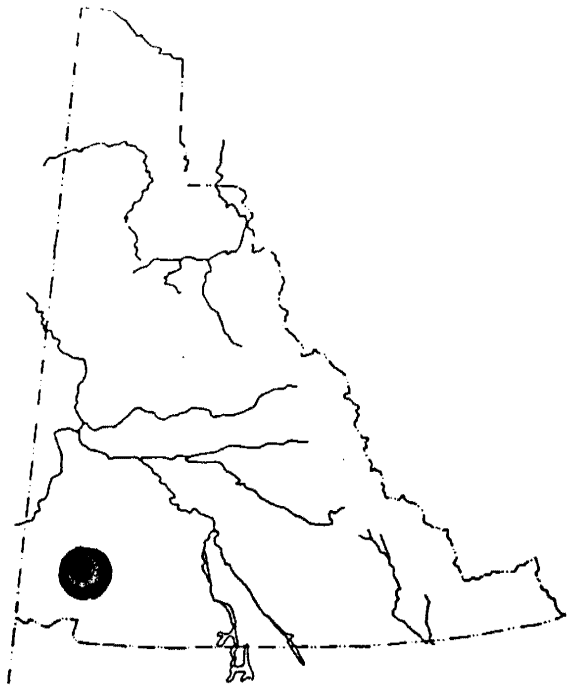
Project Leader(s): Hoefs, M. Assistance: D.I.A.N.D. Forest Service
Kuhn, J

Date Initiated: 1982 Duration: ongoing

Location: Talbot Arm District: Haines Jct.
Kluane Lake GMZ: 5-28

Dates of Field Work: Additional burning by forestry in May
Wildlife fieldwork in July

Operational Budget (YTG): n/a Cooperators: Foundation for Wild Sheep 10,000.



Reason for Project:

To improve quality of dall sheep winter range, which is being reduced in size by succession. The aim is to burn trees and shrubs and to recreate open area and low vegetation for use by sheep.

Cooperating Agencies:

Y.T.G. Dept. of Renewable Resources
D.I.A.N.D. Forest Service
Foundation for North American Wild Sheep

Progress to Date (Summary of Results):

Small scale experimental burn was done in 1983. Permanent vegetation plots were established in 52 sites. The sheep population affected as well as a "control" population have been monitored for a number of years. Harvest statistics, horn and jaw data have been collected.

Current Year Objectives, Plans:

It is planned to burn additional areas in mid-May to make this "experimental project" one of "practical" significance. Additional vegetation plots will be established and the sheep population whose winter range will be manipulated, as well as a control population will again be monitored.

Publications, Reports:

Report on vegetation analysis was produced in March 1985.

Sheep surveys are carried out annually and written up immediately after the surveys.

Current Year Report Due: September 1985

Final Report Due: Ongoing project

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title:
Wood Bison Reintroduction

Project Leader(s): Hoefs, M. Assistance: C.W.S.
Connelly, D., Kuhn, J.

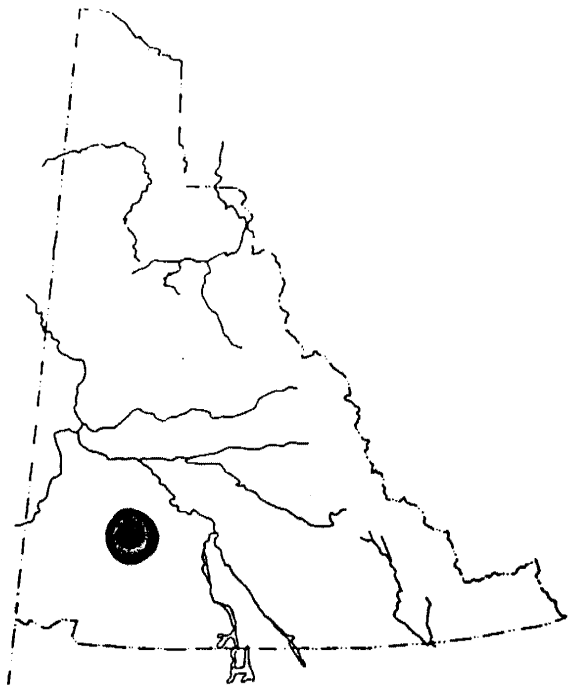
Date Initiated: 1982 Duration: ongoing

Location: Nisling River District: Whitehorse

GMZ: 5-25;5-42

Dates of Field Work: Vegetation Work (August)
Fence Completion (June - September)
Bison Introduction (December)

Operational Budget (YTG): Wildlife Branch 20,000. Cooperators: C.W.S.



Reason for Project:

To establish a population of the endangered Wood Bison in Yukon

Cooperating Agencies:

Y.T.G Dept. of Renewable Resources
Dept. of Environment (C.W.S.)

Progress to Date (Summary of Results):

Most of the fence building of a 2 square mile enclosure has been completed.

Permanent vegetation plots have been established inside the enclosure.

Current Year Objectives, Plans:

Fence building will be completed this fall.

Additional vegetation plots will be established on areas adjacent to the enclosure.

20-25 Wood Bison will be brought up from Elk Island National Park and released into the enclosure, most likely in December or January.

Publications, Reports:

Several reports are out by C.W.S., covering the initial range reconnaissance as well as the proposal to reintroduce Bison to Yukon.

Vegetation report not completed yet.

Current Year Report Due: December 1985

Final Report Due: ongoing projects

WILDLIFE PROJECT
Yukon Department of Renewable Resources

Title: Laboratory Services

Project Leader(s): Philip Merchant

Assistance: 3-5 month casual and student technical support

Date Initiated: Ongoing

Duration: Year round

Location:

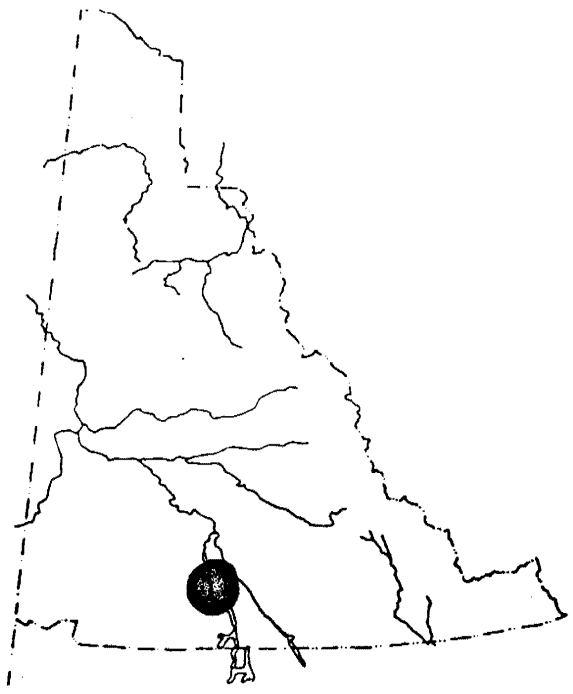
District:

GMZ: N/A

Dates of Field Work: N/A

Operational Budget (YTG): $3th

Cooperators: Student salaries



Reason for Project:

A central organized laboratory is required for the collection of information from hunter kills, for conducting laboratory analysis of specimens and providing technical assistance to examination of specimens for enforcement purposes.

Cooperating Agencies:

Department of Education, Y.T.G.

Progress to Date (Summary of Results):

(Analysis and results are reported by projects receiving assistance and support.)

Current Year Objectives, Plans:

a. Age and reproductive analysis of about 100 wolves (control and trapper killed).

b. Age analysis of about 100 wolverines (trapper killed).

c. Collect and compile biological information through hunter submission programs.

d. Process biological specimens collected through the hunter submission program.

e. General laboratory maintenance, equipment upkeep and stocking.

f. Assistance to specific projects identified by Chief of Wildlife Management.

Publications, Reports:

N/A

Current Year Report Due:

Final Report Due: