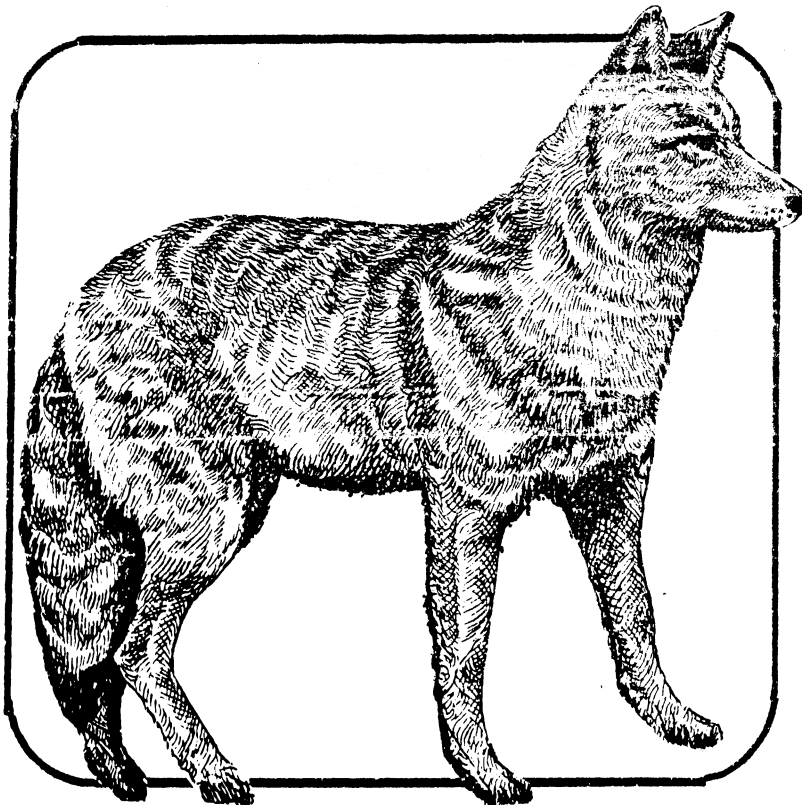


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1983

YUKON
WILDLIFE MANAGEMENT

PROJECTS



GOV'T OF YUKON
box 2703 whitehorse

RENEWABLE
RESOURCES

YUKON WILDLIFE

MANAGEMENT PROJECTS

1983

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

Hon. Howard Tracey, 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. 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:

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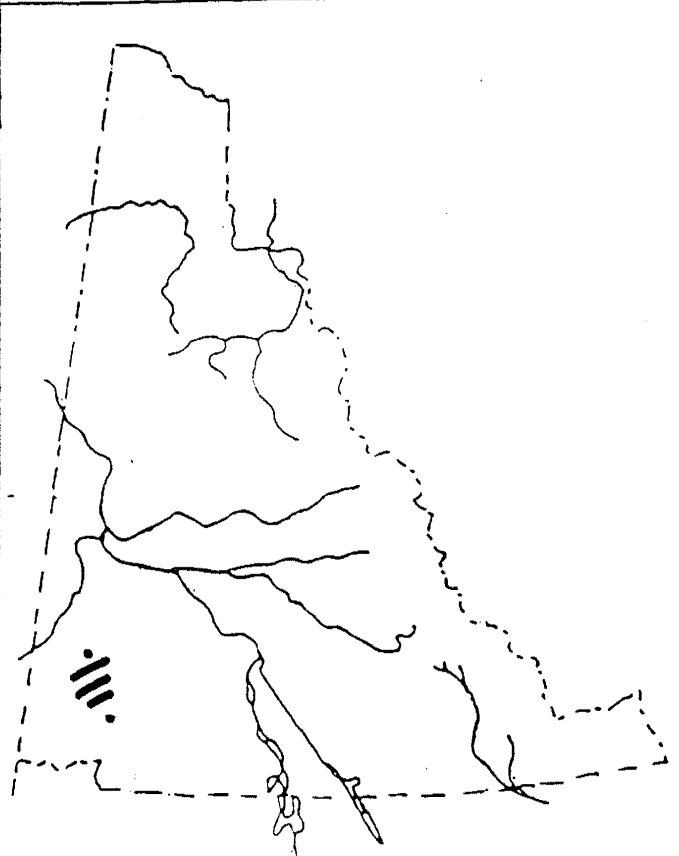
SHEEP/GOAT
MANAGEMENT
PROJECTS

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Sheep/Goat Management New Continuing Since _____

Dates of Field Work July-August 1983 District Haines Jct. GMZ 5-28

<p>Project Title</p> <p>Prescribed burning to improve sheep range.</p>	
<p>Cooperating Agencies</p> <p>N.A. Wild Sheep Foundation Y.T.G., DIAND - Forest Service</p>	
<p><u>Purpose (problem)</u></p> <p>Winter range of sheep is being invaded by shrubs and coarse grasses.</p> <p>Sheep population is of poor quality. Poor horn growth and high frequency of "lumpy jaw" disease.</p>	
<p><u>Objectives</u></p> <p>By means of prescribed burning improve quality and quantity of sheep winter range.</p>	
<p><u>Staff Involvement</u></p> <p>Project Leader:</p> <p>Hoefs</p>	<p style="text-align: right;"><u>Months</u></p> <p>1 week surveys</p> <p>10 days vegetation analysis</p>
	

Plans for current year:

In July the sheep population will be counted.

In August, 32 plots set up prior to burn will be evaluated.

Prescribed burning took place from April 25 - 29, 1983.

Lumpy jaw frequency and horn growth characteristics will be assessed from hunter-submitted specimens.

Budget:

YTG: \$5 thousand

Cooperators:

Applied for

Publications, Reports:

None yet.

Report Status for current year: December 1983

Final Report due: 1988. (5 years monitoring anticipated)

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Sheep/Goat New Continuing Since July 1, 1983
 Dates of Field Work July District Whitehorse/Haines Junction GMZ 9, 6

PROJECT TITLE Mountain Goat Reintroduction

Cooperating Agencies

Purpose (problem)

Mountain Goat, an endemic species of the Yukon, have been eradicated from many local areas during the past 50 years as a result of mismanagement. Presently, goat numbers in the Yukon are very low and nowhere can they be viewed by the average resident or visiting non-resident. White Mountain (at Jakes Corner) not only has the capability of carrying goats, but is situated such that the animals could easily be observed from the Alaska Highway within a short drive of our largest population centre.

Objectives

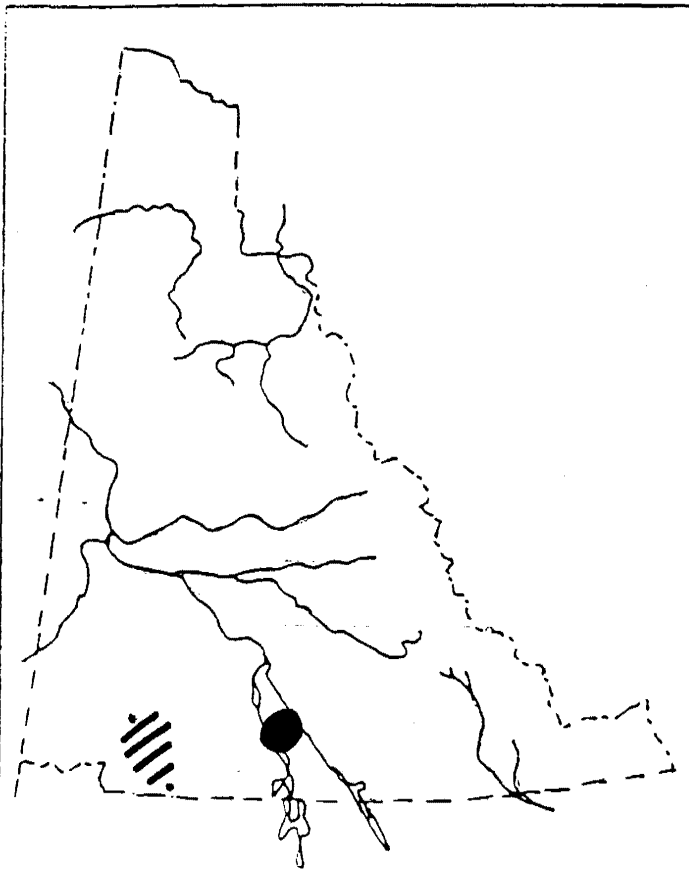
To re-establish a viable population of wild mountain goats on the bluffs which overlook the Alaska Highway just southeast of Jakes Corner. (The White Mountain block).

Staff Involvement

Months

Project Leader:

M. Hoefs



Plans for current year:

With the use of our live capture net gun and/or tranquilizer gun, 8 to 10 goats would be taken from the Kluane Game Sanctuary. After trucking the animals to Jakes Corner, they would be outfitted with radio collars and released onto the bluffs at White Mountain.

A helicopter would be employed for the capture work. These animals would have to be relocated by fixed wing aircraft (and occasionally by helicopter) on a monthly basis for the remainder of the fiscal year.

Budget:

YTG: \$15 thousand

Cooperators:

Publications, Reports:

Progress reports each 6 mos. - Final report once herd becomes well established and reproduces.

- A. The re-establishment of goats on traditional range.
- B. A situation where mountain goats can be viewed by both Yukoners and the visiting public.
- C. Technical expertise developed in capture and release of goats, and ability to more accurately predict the success of future transplant programs.

Report Status for current year:

Final Report due:

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Sheep/Goat New Continuing Since 1979

Dates of Field Work July District Whitehorse GMZ 7

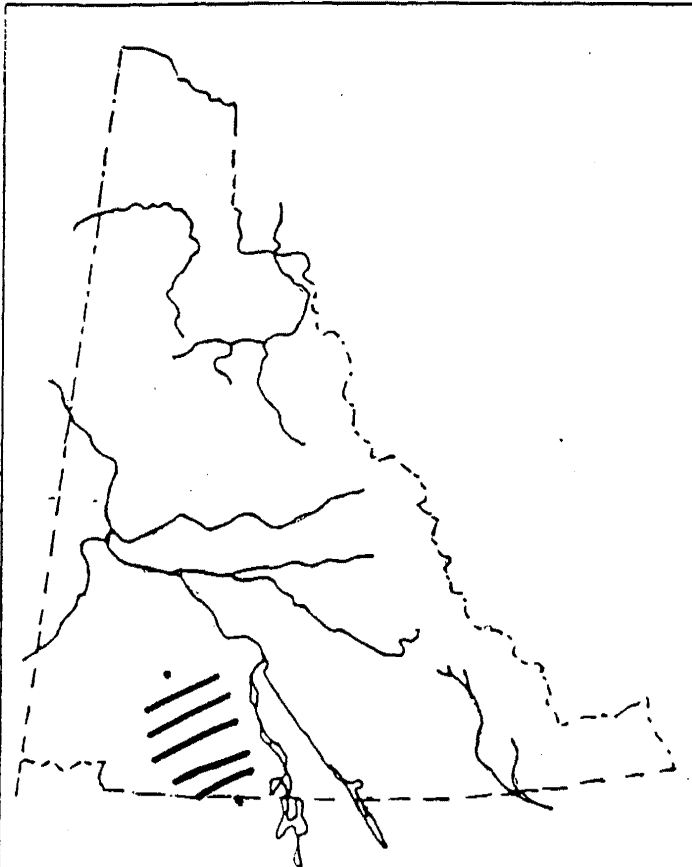
PROJECT TITLE Sheep Permit Hunt Area Inventory

Cooperating Agencies

Purpose (problem) Since the introduction of the permit hunt system for sheep in a portion of GMZ#7, the initial concerns of overhunting have been replaced by considerations of how to best allocate the harvest of what appears to be a very healthy population of sheep. Acceptable harvest numbers must be ascertained through survey results, and hunting regulations must be created which allows the optimum numbers of hunters into the area, while retaining high quality of hunt and success rates. The full of GMZ 7 was surveyed in 1977. Since 1979, portions of the permit area have been redone each year. Only two GMS's remain to be resurveyed. As well, one GMS, (7-23) is being monitored each year in order to estimate productivity of the full area. Mountain goats also inhabit these two remaining subzones. Since goat hunting has been closed in this area (1978), the goat numbers have not been re-inventoried.

Objectives

To survey GMS's 7-23, 7-28 and 7-29 and determine the present status of sheep and goat populations including such parameters as: 1) Total numbers, 2) lamb crop, 3) sex ratios and , 4) huntable numbers of rams. To assess present harvest levels of permits issued in light of both biological limitations and hunter demands, establish currently acceptable hunting regulations.



Staff Involvement

Months

Project Leader:

M. Hoefs

0.1

Plans for current year:

These surveys will require approximately three clear weather days of helicopter work, and will require the assistance of one additional observer (technician). The most appropriate time to complete this work would be late June through the end of July.

Budget:

YTG: \$ 3.5 thousand

Cooperators:

Publications, Reports:

Intergovernmental report including maps and discussion of survey results, management strategies and recommendations regarding hunting regulations.

Report Status for current year: September, 1983

Final Report due: Ongoing

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Sheep/Goat New Continuing Since 1982

Dates of Field Work July District Watson Lake GMZ 11

PROJECT TITLE Mountain Goat Inventory - Logan Mountains

Cooperating Agencies

Purpose (problem)

Game Management Zone #11 is the only area of the Yukon where goat hunting is presently permitted. Current hunting regulations are based on the initial inventory conducted during 1975.

Concerns have been expressed by the biological staff as well as hunters, as to the status of these populations in consideration of harvest levels. Hunting regulations must be reassessed in light of current population status.

In recent years, hunting pressure seems to have shifted to adjacent GMS's as a result of declining success rates in traditional (most accessible) hunting areas.

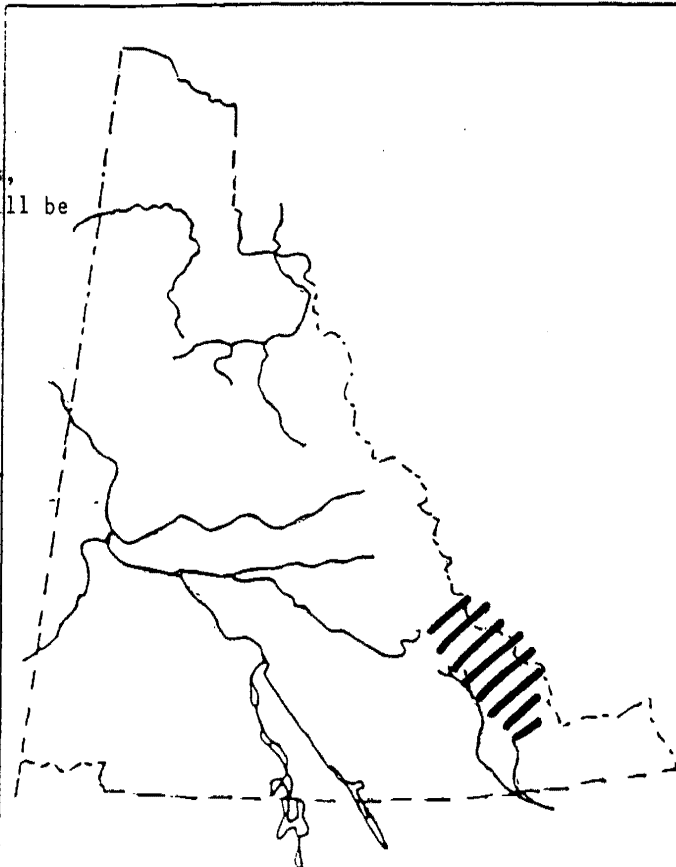
Objectives

A. To conduct intensive goat surveys in portions of GMZ #11 where significant harvest and hunter effort have been recorded recently.

B. To determine parameters of these populations such as abundance, distribution and reproductive rates.

C. To identify high use areas.

D. In light of survey results, and harvest records, hunting regulations and permitted harvest levels will be assessed, management strategies developed and hunting regulations recommended.



Staff Involvement

Months

Project Leader:

M. Hoefs

Plans for current year:

Helicopter surveys completed from fuel caches along the Cantung Road during July, with the assistance of the district Conservation Officer.

Field work including preparation and travel will require approximately one week by project leader.

Budget:

YTG: \$ 7.0 thousand

Cooperators:

Publications, Reports:

Intergovernmental report including discussion of survey results, management strategies, and recommending changes in hunting regulations if required.

Report Status for current year: September, 1983

Final Report due: September, 1983

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Sheep/Goat New Continuing Since 1975

Dates of Field Work July District Whitehorse GMZ 7

PROJECT TITLE Bennett Range Goat Survey

Cooperating Agencies

Purpose (problem)

The population of goats which inhabit the Bennett Range (GMS 7-35) was in the past, exposed to heavy hunting pressure which nearly resulted in its demise. Presently this population is closed to hunting, however, the Yukon Fish and Game Association has requested of the Minister that the area again be opened to hunting. Recent surveys of the area indicate a slow recovery of the population. Last year's survey identified a large number of animals (15) having immigrated into the area. We are still not certain of the carrying capacity of the range or of the exact size of the herd.

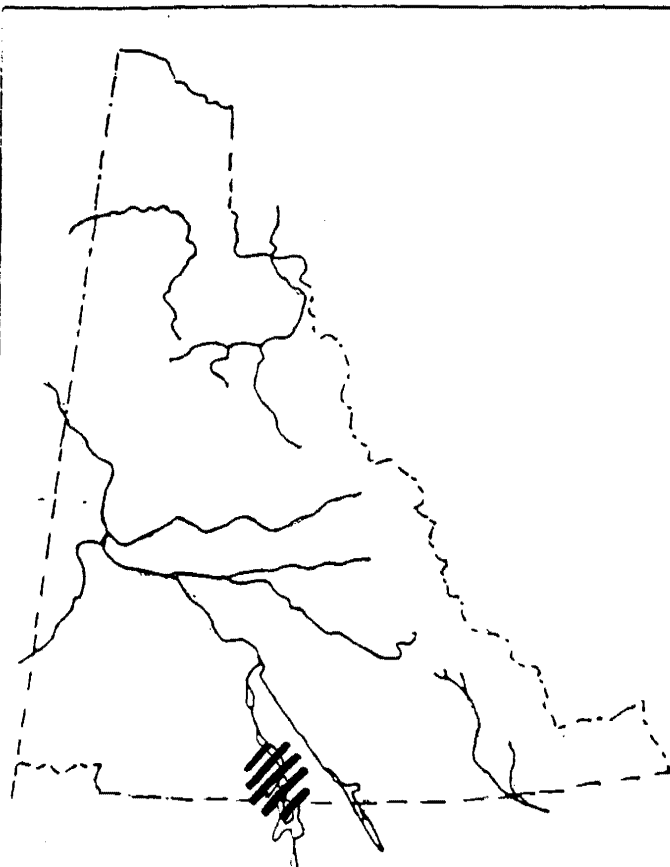
Objectives

To conduct a 1983 summer survey of the goat population on this range, record total numbers, dispersal and productivity. It is also intended to attempt a survey of the area from the ground, and compare its effectiveness and costs, as well as providing information of recruitment and sex ratios which cannot be obtained from the air. By means of a ground survey, to determine the potential of this area for wildlife viewing and photography.

Staff Involvement Months

Project Leader:

M. Hoefs



Plans for current year:

Survey will be completed by means of helicopter from Whitehorse during July-August, (approximately 2 hours flying required).

Shortly thereafter, the ground survey will be done by means of boat from Carcross, and hiking the range on foot over a two or three day period.

A field assistant will be required for this project.

Budget:

YTG: \$1.5 thousand

Cooperators:

Publications, Reports:

Internal report containing data and discussion which will not only increase our abilities to properly manage these populations, but provide information data base to which other population survey results may be compared.

A short article for public consumption describing the wildlife viewing and photographic potential of this area.

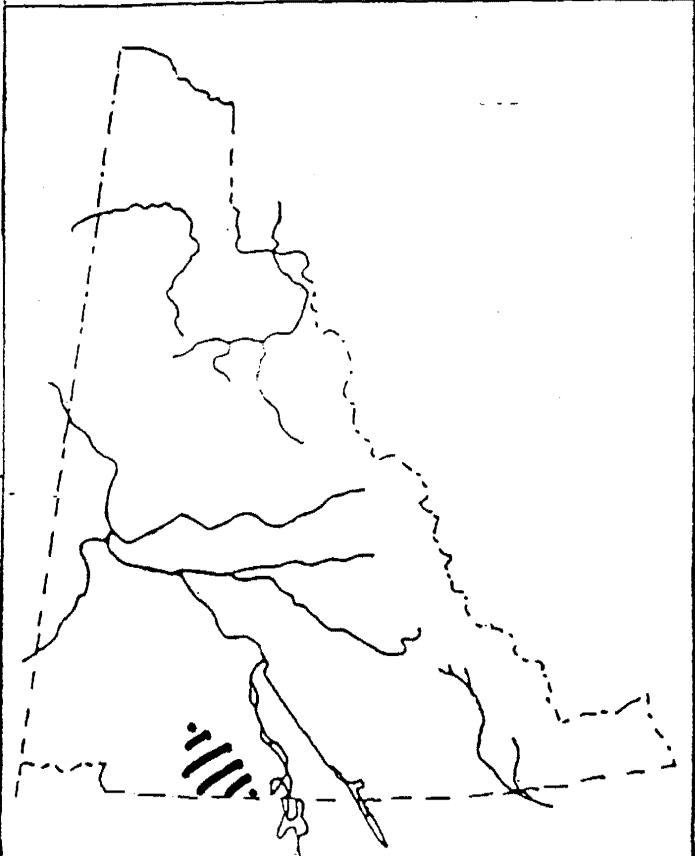
Report Status for current year: October 1983

Final Report due:

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Sheep/Goat Management New Continuing Since March 1983

Dates of Field Work May and July District Whitehorse GMZ 7

Project Title	
Sheep Surveys in AGIP claim area.	
Cooperating Agencies	
AGIP Mineral Exploration Co.	
<u>Purpose (problem)</u>	
These surveys will be used to determine the impact of AGIP mineral exploration and development in the Mount Skookum area.	
<u>Objectives</u>	
<ol style="list-style-type: none"> 1. Determine sheep winter ranges in the study area. 2. Determine lambing sites. 3. Determine summer use. 4. Develop impact assessment of AGIP activity in the area. 	
<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Manfred Hoefs (interim)	2

Plans for current year:

Winter range surveys were conducted in March.

Lambing surveys to be conducted in late May.

Summer surveys to be conducted in mid July.

Budget:

YTG: \$2 thousand

Cooperators: \$10 thousand

Publications, Reports:

Field reports produced after each survey

Report Status for current year:

Final Report due: December 1983

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Sheep/Goat New Continuing Since 1977

Dates of Field Work July District Dawson/Mayo/Whitehorse GMZ 1.3.4.9

PROJECT TITLE

Monitor Unhunted Sheep Populations

Cooperating Agencies

Purpose (problem)

In order to properly assess the effects of hunting on sheep populations, it is necessary to closely monitor the performance of unhunted populations, (ie. survivorship, lamb crops, dispersal, sex ratios, number and quality of rams produced and disease).

It is necessary to monitor unhunted populations in various gross geographical areas in order to identify effects of climate (ie. south, central, north Yukon).

Objectives

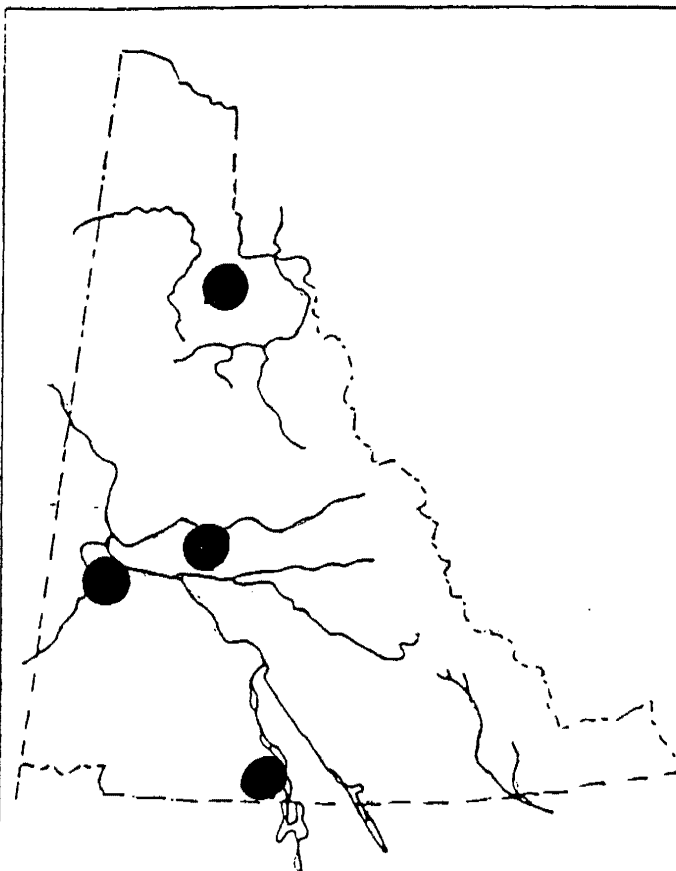
To monitor population parameters of south, central and northern Yukon populations of sheep that are not being exposed to hunting pressures.

Staff Involvement

Months

Project Leader:

M. Hoefs



Plans for current year:

During the most appropriate time period (June, July, August) the unhunted sheep populations listed below will be surveyed with the use of a helicopter. An observer (Technician) will be required to assist with the field work.

- A. Southern Yukon - Grey Ridge (GMS 9-03) Carcross Area
- B. I) Central Yukon - White Mountain (GMS 3-16) Stewart Crossing Area
II) Central Yukon - McArthur Game Preserve (GMS 4-03)
- C. Northern Yukon - Mt. Cronin (GMS 1-58) Richardson Mountains

Budget:

YTG: \$6.5 thousand

Cooperators:

Publications, Reports:

Annual survey reports produced for sheep management records, which can be utilized during the assessments of other surveys and sheep management concerns.

Report Status for current year: September, 1983

Final Report due: Ongoing

MOOSE
MANAGEMENT

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Moose Management New Continuing Since _____

Dates of Field Work Throughout year District Whitehorse GMZ 7 & 9

Project Title

The mortality of moose calves in the southern Yukon.

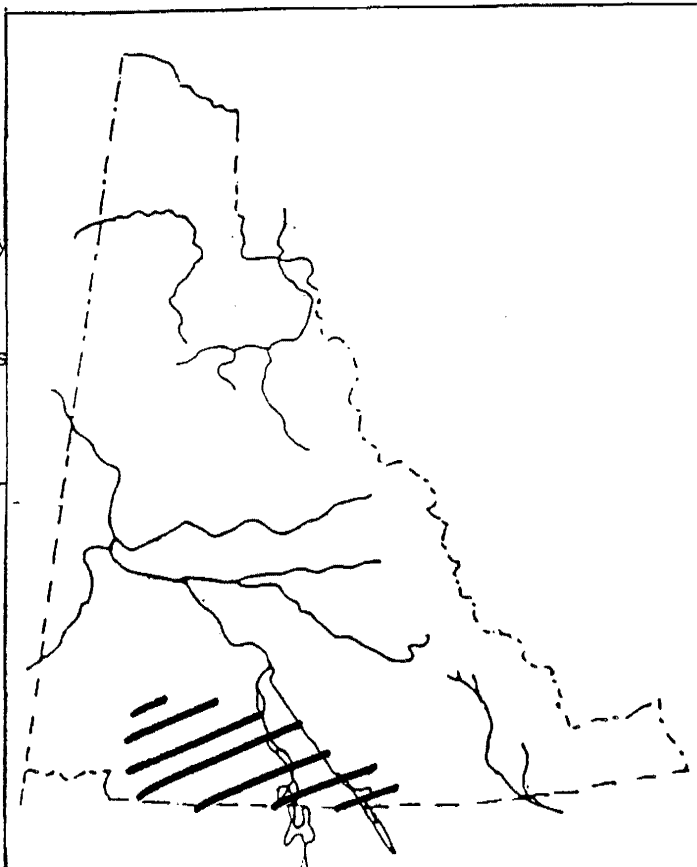
Cooperating Agencies

Purpose (problem)

Fall moose composition counts from the past two years have shown that calf survival to six months of age is extremely low. Survival of these calves to one year of age, and survival of adults is also potentially very low. These facts combined with an annual hunting mortality of 8-9% creates a potential declining moose population. Wolves have been cited as the possible cause of the high natural mortality. For this reason an intensive study on the wolf population will coincide with the moose calf project.

Objectives

1. Determine cause, extent and timing of moose calf mortality.
2. Determine cause, extent and timing of adult moose natural mortality.
3. Determine sightability of cow/calf groups during fall composition surveys.
4. Determine habitat selection (primarily calving areas) and movement patterns of moose.
5. Determine population status, movements and prey selection within the moose study area.



Staff Involvement

Months

Project Leader:

D. Larsen	9
B. Hayes	2
P. Merchant	5
A. Baer	4
R. Markel	4

Plans for current year:

1. Radio collar moose calves and wolves.
2. Monitor calves intensively between May - July.
3. Monitor moose calves and adults as well as wolves less intensively through the year.
4. Monitor specific wolf packs for short periods in summer and winter to determine kill rates and prey selection.

Budget:

YTG: \$150 thousand
Cooperators:

Publications, Reports:

Reports will be prepared throughout the year, after each major phase of the project. The first report due September-October.

Report Status for current year:

Final Report due: Year end.

WOODLAND CARIBOU

MANAGEMENT

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Woodland Caribou Management New Continuing Since March, 1982

Dates of Field Work Continuous District Ross River/ Watson Lake GMZ 10 & 11

Project Title Finlayson Caribou Herd Management Program

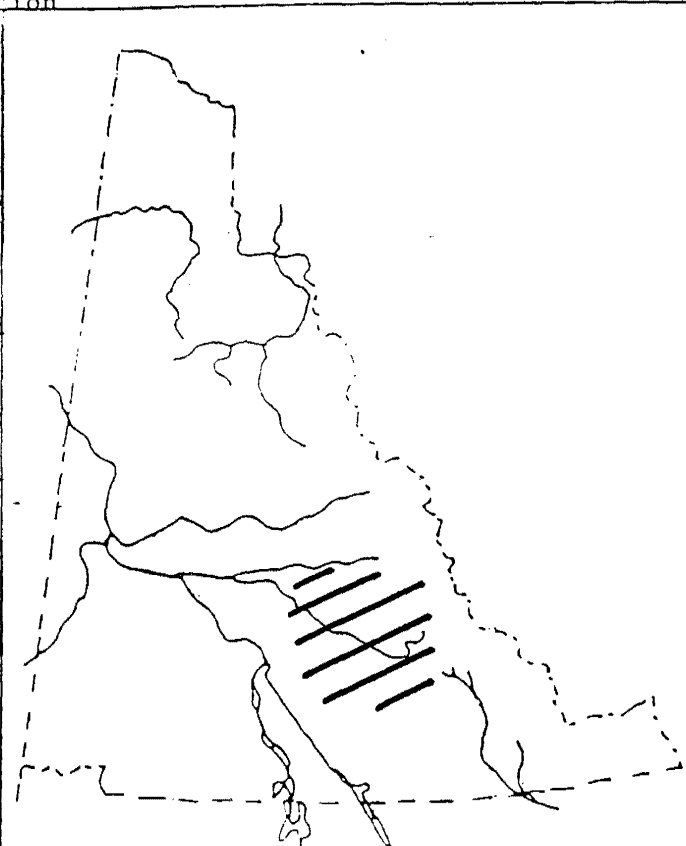
Cooperating Agencies
Possibly Safari Club and N.A.F.W.S.

Purpose (problem)

A population decline has been documented for the Finlayson Lake caribou herd. Causes appear to be overhunting (N=200) in the face of high predation rates where wolves are abundant (N=+200) in a 7300 mi² range. Regional development plans, i.e. Hoole Canyon and Ross River Dams, Mac Pass mineral extraction, will impact the status of this herd.

Objectives

1. Monitor recruitment rates and population size of herd.
2. Remove a significant percentage of wolves in management area.
3. Improve information and education relationship with native groups involved.
4. Possibly survey moose for impact of removals.
5. Describe habitat requirements of herd to provide basis for mitigating circumstances in light of industrial developments.



Staff Involvement

Months

Project Leader:

R. Farnell	8
J. McDonald	4
B. Hayes	1
P. Merchant	1

Plans for current year:

Project intensity is subject to acceptance of a pending proposal with Safari Club and N.A.F.W.S. for financial assistance.

Y.T.G. Funds Only

Late May - Calving grounds survey
June - Post-calving count
September - Pre-rut survey
September/October - Rut composition count and population estimate
Late February - march - Wolf removals

If outside funding included

November - Post-rut moose survey
November/March - Wolf removals (over expanded area more intensively) and snaring
"Judas wolves"

*caribou demography monitored more intensively

March - radio collar six females in Wolf Lake caribou herd

Budget:

YTG: \$41 thousand

Cooperators: Possibly \$50 thousand

Publications, Reports:

1. Investigations into the status of the Finlayson Lake caribou herd, Interim Report, October 1982
2. File Report, January 1983
3. File Report, February 1983
4. File Report, April 1983

Report Status for current year: Interim Report , October 1983

Final Report due: 1986

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Woodland Caribou Mngt. New Continuing Since _____

Dates of Field Work March 1984 District Watson Lake GMZ 10

Project Title		Expanded Woodland Caribou Inventory (Little Rancheria Herd)
Cooperating Agencies		C.Y.I. (Pending Proposal)
<u>Purpose (problem)</u>		Local residents have expressed concern over status of Little Rancheria caribou population wintering in the Liard Basin. Little information exists for range tradition, population size, and recruitment rates. Herd is known to summer in B. C. (Bergurud 1978) and local residents reports suggest that this small population is not utilizing former ranges and may be declining.
<u>Objectives</u>		
<ol style="list-style-type: none"> <u>Range tradition</u> - Using radio telemetry techniques determine home range of this herd. <u>Population size</u> - derive accurate population estimate. <u>Reproductive Success</u> - determine calf production, yearling, recruitment, sex ratio and overwinter calf survivorship. <u>Harvest</u> - historical and current levels of sport and native hunter harvest. <p>*Project will take two years.</p>		
<u>Staff Involvement</u>	<u>Months</u>	
Project Leader:		
R. Farnell		
J. McDonald	.5	

Plans for current year:

Subject to proposal approval from C. Y. I.

March 1984 - delineate winter distribution and radio collar 12 female caribou.

Budget:

YTG: \$5 thousand

Cooperators: C.Y.I. \$20 thousand

B. C. ??

Funding depended on further organization

Publications, Reports:

Report Status for current year: File Report March 1984

Final Report due: May 1986

November, 1982

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Plans for current year:

1. June 7th Calving Survey
2. October 3rd Rut Survey
3. March 10th Winter Survey

Budget:

YTG: \$5 thousand

Cooperators:

Publications, Reports:

File Notes - Radiocollaring Results from Ibex Caribou Population Capture Work November 1982.

Report Status for current year: File Report April 1984

Final Report due: N/A

BARRENGROUND CARIBOU

MANAGEMENT

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Porcupine Caribou Mngr. New Continuing Since MARCH 1983

Dates of Field Work All year District Old Crow GMZ 1 & 2

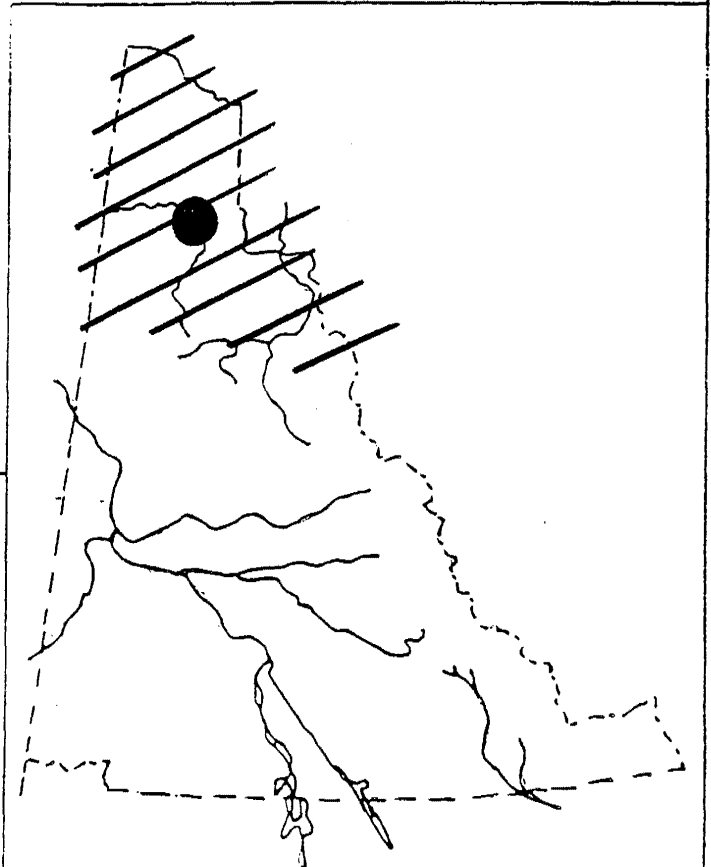
PROJECT TITLE Juvenile Mortality and Reproductive Rates of Porcupine Caribou

Cooperating Agencies U.S. Fish and Wildlife, Alaska Dept. Fish & Game, C.W.S., DIAND.

Purpose (problem)
Fundamental towards management of the Porcupine Herd is the knowledge of the magnitude of juvenile mortality and age specific reproductive rates. Problems with spring composition counts with this herd requires radio telemetry.

Objectives
1. Determine spring mortality rate of calves.
2. Determine reproductive rates for yearlings and 2 year olds.

3. Examine spring breakage of maternal bond.



<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Don Russell	2mm
Grant Lortie (contract)	2mm
Casuals	2mm

Plans for current year:

In March 1983, 38 calves and 5 yearlings were radio collared east of Old Crow.

In April, 1983 all but 3 calves were relocated, one calf collar exhibited a mortality mode.

In June, July and September, 1983 all radio collars will be relocated and mortality mode collars will be retrieved.

Project is expected to continue for 3 years.

Budget:

YTG: \$1 thousand

Cooperators: \$50 thousand

Publications, Reports:

Field reports on initial collaring and relocation have been written.

Report Status for current year: November , 1983

Final Report due: November, 1985

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Porcupine Caribou Mngt. New Continuing Since 1978

Dates of Field Work May-July District Old Crow GMZ 1

PROJECT TITLE

Spring Movements of Bulls of Porcupine Caribou

Cooperating Agencies

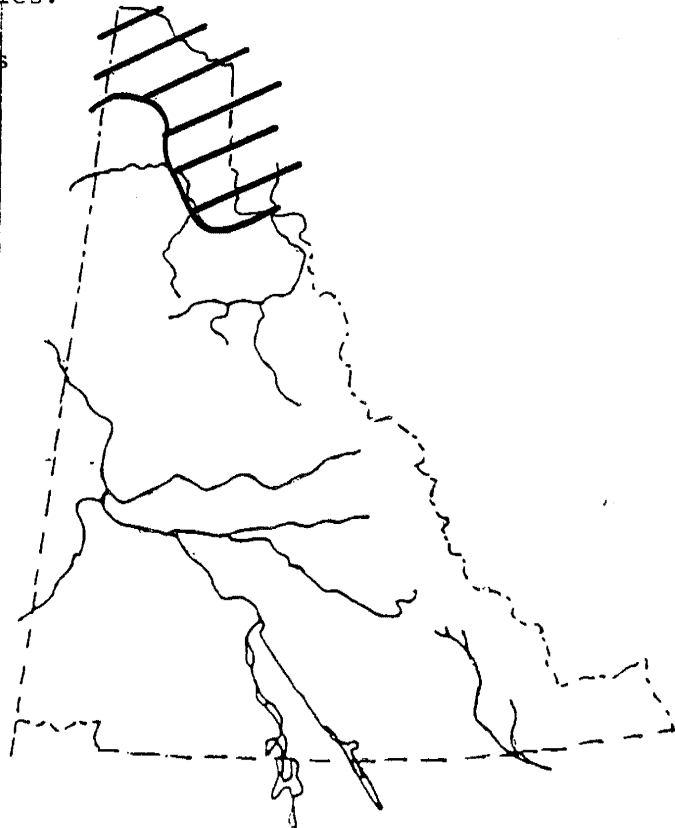
C.W.S. and U.S. Fish and Wildlife Branch

Purpose (problem)

This study is designed to examine range use and movements of bulls in the northern Yukon as input into a Beaufort Sea Development Plan. This aspect of the Porcupine herd ecology has been poorly documented in past surveys.

Objectives

1. Examine range use and movements of bulls in May-July.
2. Prepare possible impact scenarios for Beaufort Seas related activities.
3. Compare bull range use at this critical time to cow range use on calving grounds.



Staff Involvement

Months

Project Leader:

Art Martell CWS	3
Don Russell	1

Casuals	6
---------	---

Plans for current year:

In March 1983, 5 radio collars were placed on bulls east of Old Crow. These, and other active bull collars, will be monitored at approximately 2 week intervals from mid May to July 1.

A field camp will be established to examine habitat use, food habits, activities and plant phenology, during this critical period of caribou's life cycle.

Budget:

YTG: 1 thousand

Cooperators: 25 thousand

Publications, Reports:

Field reports will be prepared after surveys

Report Status for current year: November, 1983

Final Report due: 1985

BEAR
MANAGEMENT

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bear Management New Continuing Since _____

Dates of Field Work August September District Dawson GMZ 2 & 3

PROJECT TITLE

Spoiled bear management associated with the Dawson Fishery.

Cooperating Agencies N.W.T. Wildlife Service

Purpose (problem)

The 1981 bear attack on fishermen in the Dawson area revealed a potentially serious problem. Fish drying and processing plants and associated camps have relatively severe bear problems.

Deterrent systems to manage bears that do not involve killing bears have been developed for polar bears and will be tested on Yukon River black bear.

Objectives

To monitor the effectiveness of bear deterrent systems at a simulated fishing camp near Dawson during the Chum salmon run.

To test a variety of camp design and maintenance alternatives to determine whether or not they will be effective.

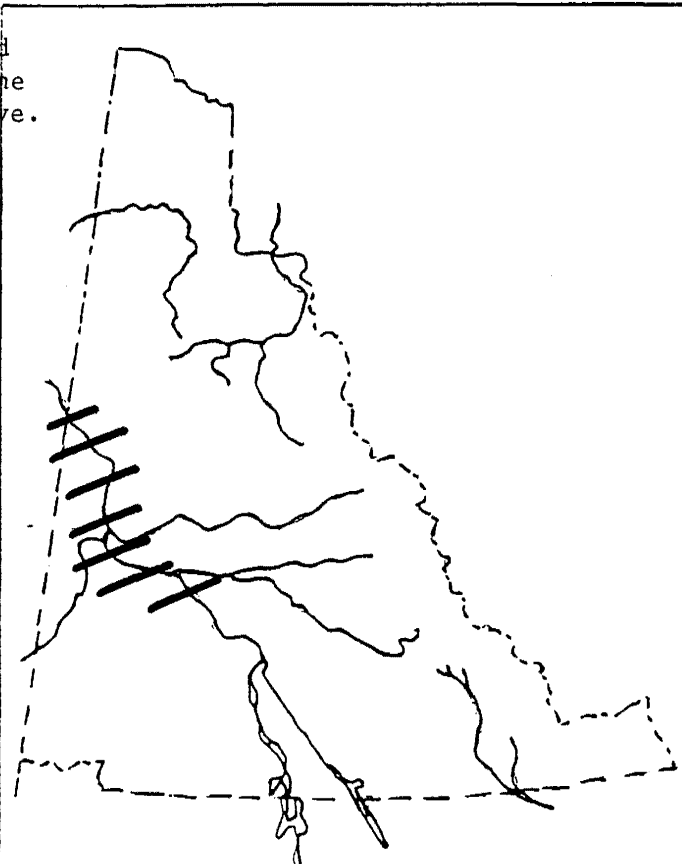
Staff Involvement

Months

Project Leader:

B. Stenhouse 2
N.W.T. Wildlife Service

B. Smith 1



Plans for current year:

1. To set up a camp downstream of Dawson and test a variety of camp design alternatives that might prove successful in reducing bear visitation.
2. To test a variety of bear deterrent systems (ie. rubber projectiles from shotguns, electric fences) in the camps of cooperative fishermen.

Budget:

YTG: Nil

Cooperators: Unknown at this time (5,000+)

Publications, Reports:

Annual reports available-on request.

Report Status for current year:

Final Report due:

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bear Management New Continuing Since _____

Dates of Field Work May & June, 1983 District Haines Jct. GMZ 5

PROJECT TITLE

Aishihik area bear investigations, inventory, productivity, spring ecology.

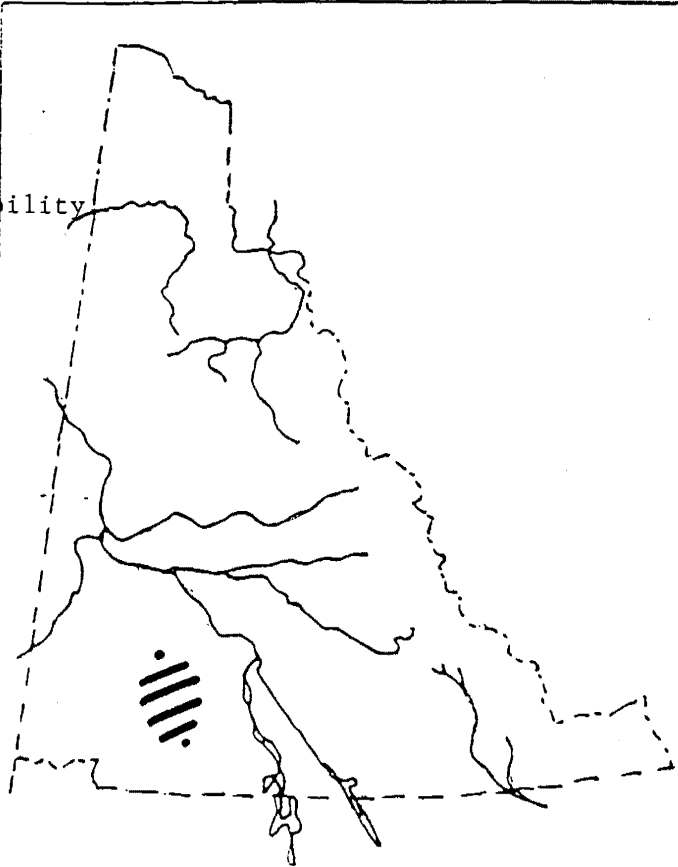
Cooperating Agencies

Purpose (problem)

Wildlife management decision makers currently lack adequate quality information with which to manage the increasing stresses on black and grizzly bear populations in the S.W. Yukon. Present population and harvest estimates suggest relatively serious local declines are occurring. Since escalating costs erode the ability of wildlife managers to improve this data base, this project is essentially a feasibility study to determine if a minimum cost research design will provide adequate data.

Objectives

1. To determine if ground oriented snaring is a feasible method to capture a representative sample of bears in the Aishihik area.
2. To determine grizzly bear and black bear female densities, and selected natality parameters.
3. To determine broad pattern of spring feeding ecology and vulnerability



Staff Involvement

Months

Project Leader:

B. Smith	1
G. Lortie	2
Student	3

Plans for current year:

To prepare snare sites in mid May and attempt to capture bears in baited foot snares in June.

To evaluate capture success. The capture sample and the harvest sample from this area in July.

Recommend 1984 research design plans and relevant harvest regulation changes.

Budget:

YTG: \$8 thousand

Cooperators: None

Publications, Reports:

Technical summary will be produced by August 31.

Report Status for current year:

Final Report due:

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bear Management New Continuing Since 1979

Dates of Field Work June 1983 District Dawson GMZ

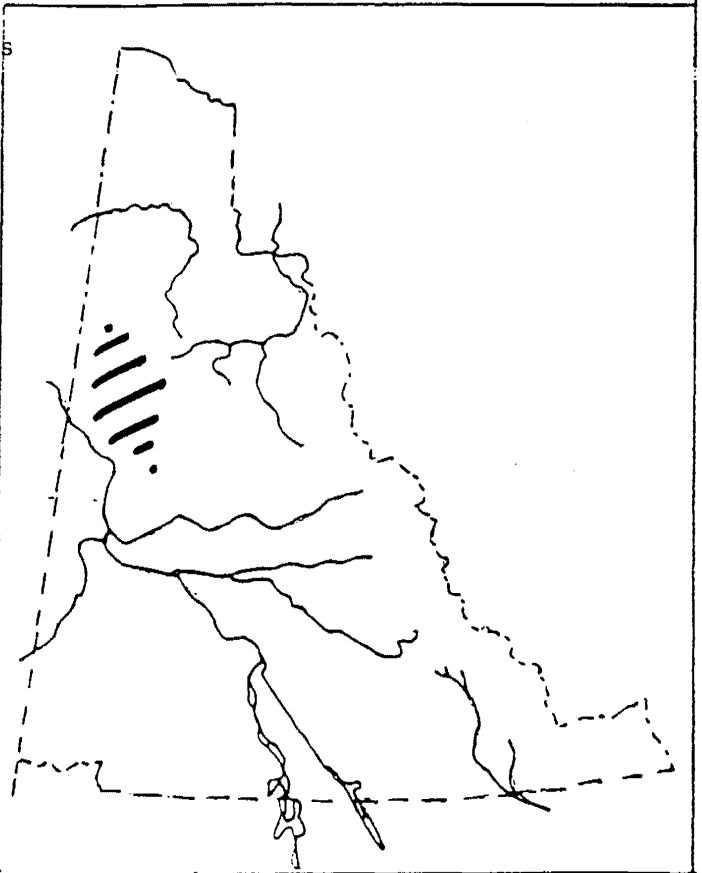
PROJECT TITLE Ogilvie Mountain Grizzly Bear Population Ecology Investigations.

Cooperating Agencies University of B. C.

Purpose (problem)
The quota management system for grizzly bears is based on estimates of density and sustainable yield levels. Controversies arose during the implementation of this system whereby various long term outfitters had detected no population decline at harvest levels considerably in excess of quotas. This study seeks to identify population status, determine appropriate harvest levels and understand grizzly bear vulnerability in one such area in the S.W. Ogilvie.

Objectives
1. To determine the population status and demographics parameters of grizzly bears in the N. central Yukon.

2. To determine sustainable yields for grizzly bears in this area.



<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
B. Smith	4
Casual	2

Plans for current year:

1. Three surveys to monitor female reproductive performance, cub survivorship and den site selection.
2. Analysis and reporting.

Budget:

YTG: \$5 thousand

Cooperators: U.B.C. Nil

Publications, Reports:

In prep.

Report Status for current year:

Final Report due:

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bear Management New Continuing Since 1980

Dates of Field Work None District all GMZ all

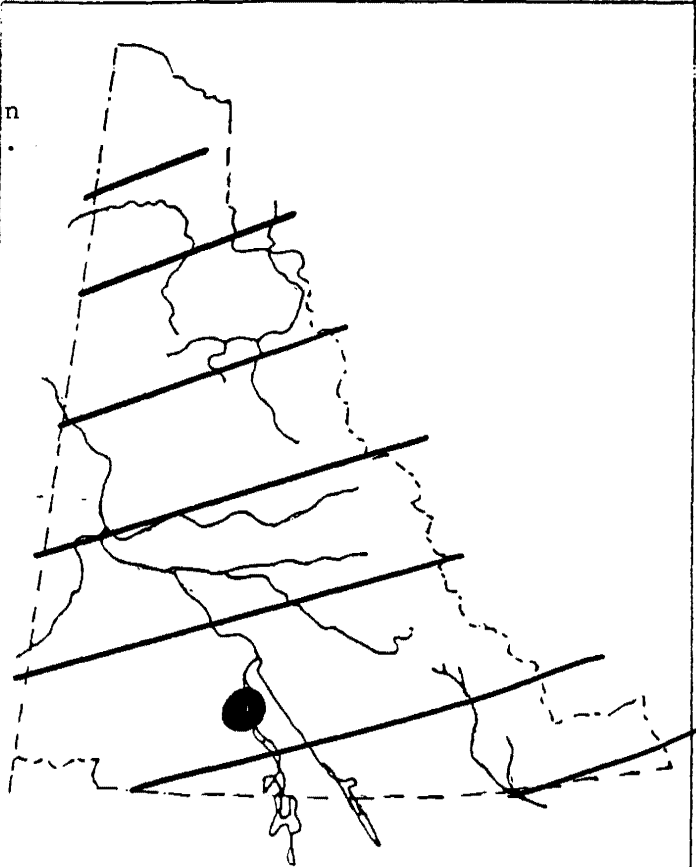
PROJECT TITLE Bear Safety Awareness Program.

Cooperating Agencies University of Calgary

Purpose (problem)
Several management related projects are in place to improve the Bear Awareness Program. Visits to exploration camps, fishing camps, with hunters, etc. help to improve this program. This year North Slope bear problems and management will be examined and a literature for hunters on prevention of bear problems at their kills will be presented.

- Objectives
1. To enhance public awareness of the need for bear management and conservation.
 2. To improve public understanding of bear behavior to reduce potentially injurious bear/human interactions and confrontations.
 3. To thoroughly investigate bear attacks to gain a better understanding of this aspect of bear biology.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
B. Smith	2



Plans for current year:

1. Public meetings and educational programs.
2. Reporting and audiovisual work on arctic bear programs and hunter moose kill problems.

Budget:

YTG: less than \$3 thousand

Cooperators: University of Calgary

Publications, Reports:

numerous educational guides produced to date include:

- Bear Facts
- Field Guide to Yukon Bears for Exploration and Placer Industries
- Yukons Arctic Bears - A guide to Bears Above Treeline (in prep.)
- Hiking and Bears - an educational slide show
- Bear Bacon and Boot Grease - Recipe booklet
- Arctic Bears - A struggle for Survival - educational slide show

Report Status for current year: Program summary in prep.

Final Report due:

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bear Management New Continuing Since 1978

Dates of Field Work no field work District All districts GMZ all

PROJECT TITLE Trends in Spoiled Bear Management, 1974 to 1983.

Cooperating Agencies

Purpose (problem)

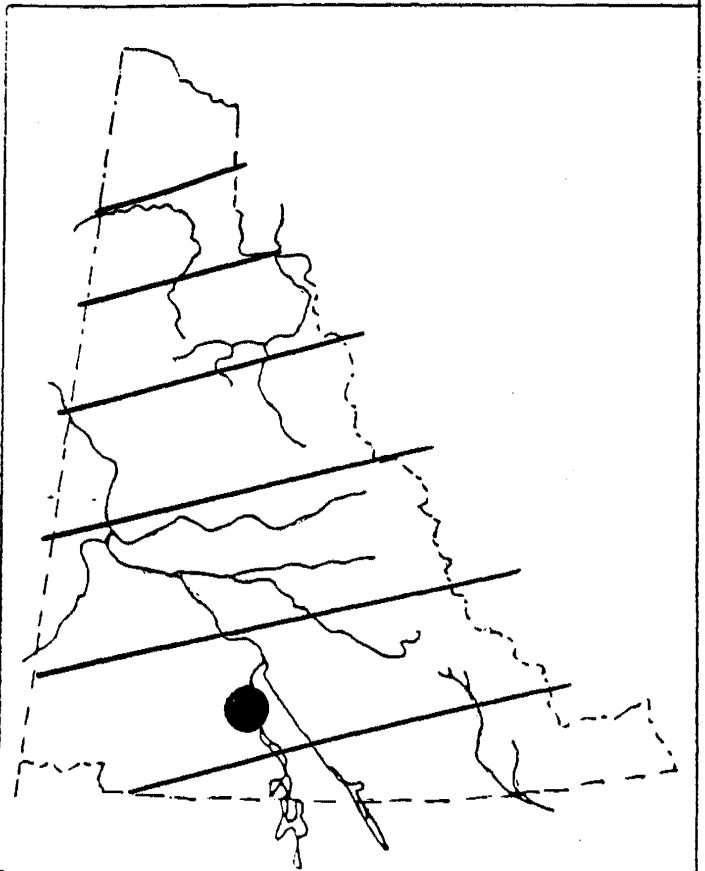
Patterns in the response and management of spoiled bears await analysis and reporting to evaluate the cost effectiveness of various management programs.

Objectives

1. To identify patterns in the management of spoiled bears in the territory.

2. To examine the cost benefit alternatives of various refuse and spoiled bear management options.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
B. Smith	1
Casual	2



Plans for current year:

Coding

Analysis

Reporting

Budget:

YTG: Administrative costs only.

Cooperators:

Publications, Reports:

Report Status for current year: October, 1983

Final Report due:

FURBEARER
MANAGEMENT

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2. Wolverine.....	39
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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since 1981

Dates of Field Work April, September, winter District All GMZ _____

PROJECT TITLE
Yukon Furbearer Inventory

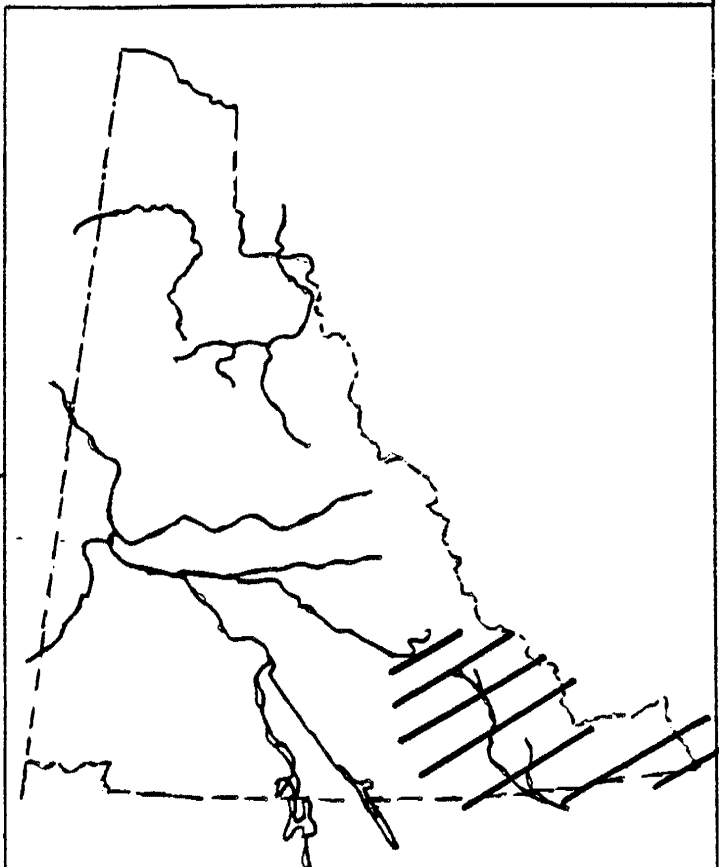
Cooperating Agencies Yukon River Basin Committee.

Purpose (problem) The fur resource capability is requisite knowledge to sustained yield and conservation based species management plans. The population status of furbearers in Yukon is largely unknown. Extensive furbearer inventory projects were initiated with external funding (DIAND, Mac Pass Task Force, Yukon River Basin Committee), in 1981 and 1982, however, the Y.T.G. internal furbearer management budget will sustain the project over the long run.

Objectives
Inventory and monitor Yukon's furbearer resources on a regular basis.

Staff Involvement

	<u>Months</u>
Project Leader:	
Brian Slough	3.5
Harvey Jessup	1.5
Karen Mueller	0.5
Field technicians	6.0
Office Technician	2.0



Plans for current year:

1. September/October 1983 Aerial survey of beaver food piles in Yukon and Liard River Basins. Possible beaver inventory in northern Yukon.
2. Complete Yukon River Basin furbearer inventory project report by December, 1983.
3. Winter track-count surveys or other winter inventory of furbearers in Liard Basin.

Budget:

YTG: 29.6 thousand

Cooperators: 29.6 thousand (Yukon River Basin)

Publications, Reports:

Slough, B. G. 1982. Yukon River Basin Furbearer Inventory - Progress Report. Y.T.G. Unpub. Rep.

Slough, B. G. 1982. Preliminary investigation of the muskrat population and harvest of Old Crow Flats and Northern Yukon. Y.T.G. Unpub. Rep.

Slough, B. G. 1983. 1981-82 Furbearer Inventory, Habitat Assessment and Trapper Utilization of the North Canal-MacMillan Pass Development Area. Y.T.G. Unpub. Rep.

Report Status for current year: N/A

Final Report due: December, 1983.

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since 1978

Dates of Field Work All year District Haines Junction GMZ 6

PROJECT TITLE Wolverine Population Studies

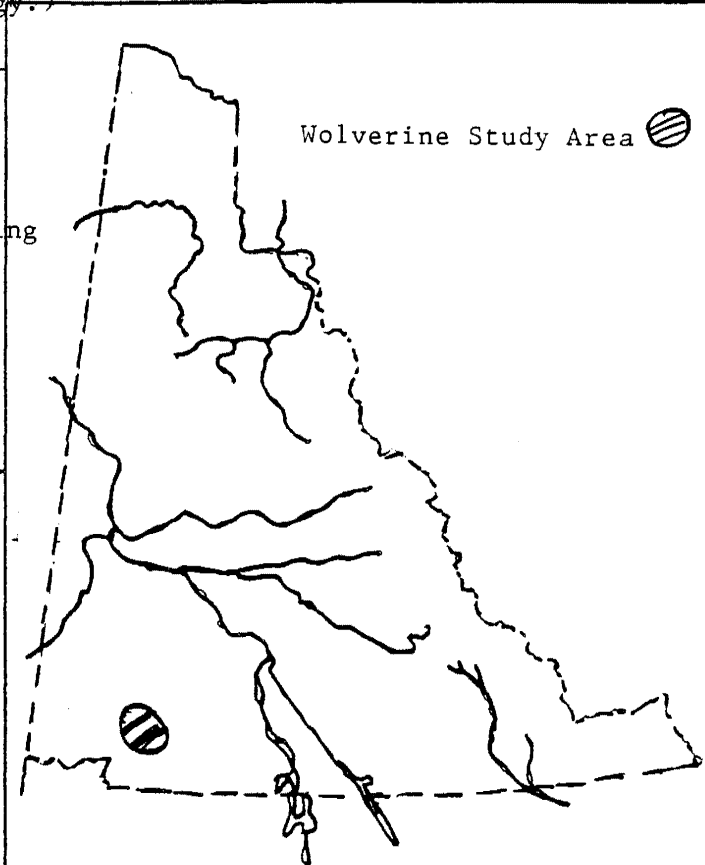
Cooperating Agencies World Wildlife Fund
Simon Fraser University

Purpose (problem)
The wolverine is rare throughout its range in Canada. The Yukon Territory contains a significant remnant of the original wolverine habitat and populations once found in Canada. Very little is known of the ecology and biology of the wolverine in Yukon. This information is basic to the development of a comprehensive management plan for the species.

Objectives

1. Within a defined study area describe a) food habits, b) habitat requirements, c) population characteristics (density, reproduction, sex ratio, age structure, morphology.)
2. Determine the population characteristics of wolverines trapped in Yukon (Analysis of carcasses submitted since 1978).
3. Review wolverine hunting and trapping regulations in Yukon.
4. Develop population monitoring techniques.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Vivian Banci (S.F.U.)	12.0
Brian Slough	1.0
Harvey Jessup	1.0



Plans for current year:

1. Carcass analysis and collection of carcasses from trappers (Nov. 1 - May 31).
2. Field work (radio collaring, tracking, etc.) to begin in May and continue throughout the year.

Budget:

YTG: \$5.0 thousand

Cooperators: \$9.0 thousand

Publications, Reports:

Slough, B. G. 1982. Status of Wolverine in Yukon. Y.T.G. Unpub. Rep.

Harestad, A. S. 1983. Ecology and Behavior of Wolverine. Progress Report prepared for World Wildlife Fund. Simon Fraser University.

Report Status for current year: Progress Report

Final Report due: 1985 (M. Sc. thesis)

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since 1920

Dates of Field Work _____ District _____ GMZ _____

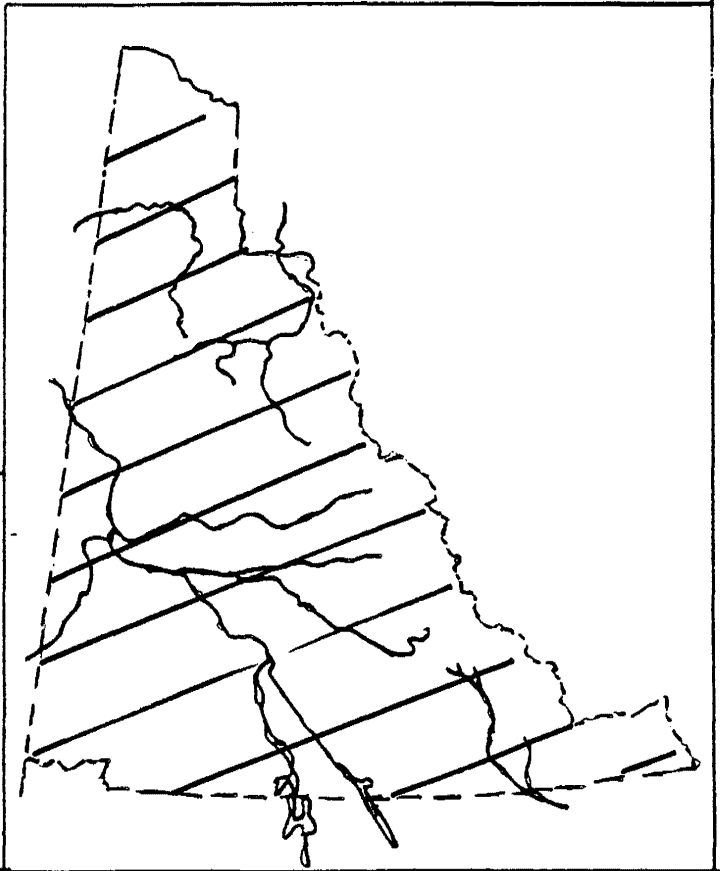
PROJECT TITLE
Historical Fur Harvest Data Analysis

Cooperating Agencies

Purpose (problem)
A fur harvest data system is required to obtain management relevant information to ensure the integrity of our furbearer populations as well as to provide information for trapline administration.

Objectives
Continue to improve the fur harvest data system by summarizing all annual fur harvest, trapper, and trapline data in master files and by maintaining current trapline files for administrative purposes, on the Y.T.G. computer.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Harvey Jessup/Brian Slough	1.0
Karen Mueller	0.5



Plans for current year:

1. Edit trapline files and distribute to District Conservation Officers.
2. Produce historical fur harvest reports from master files.
3. Produce 1981/82 and 82/83 fur harvest reports.

Budget:

YTG: \$5.0 thousand

Cooperators:

Publications, Reports:

1. Annual fur harvest reports since 1975/76.
2. Report on distributions, densities and harvest trends of furbearers.

Report Status for current year: Annual

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since 1978

Dates of Field Work - District - GMZ -

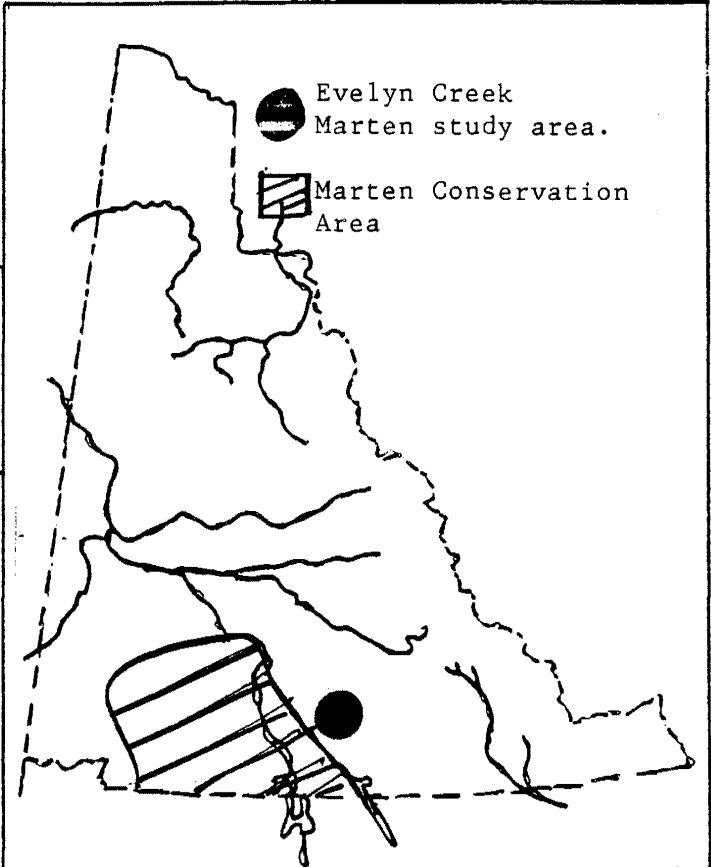
PROJECT TITLE Marten Management

Cooperating Agencies

Purpose (problem) Historical harvest data suggests that current marten harvests in the territory are approaching the upper limit of the harvestable population. In addition there is a large area in the southwestern Yukon where marten are very scarce, indicating a history of fires and overharvesting. Recolonizing is being prevented by trapping pressure.

- Objectives
1. Develop a comprehensive management plan to ensure the perpetuity marten in Yukon.
 2. Provide the trapper with the necessary management tools to effectively manage marten on his trapline on a maximum sustained yield basis.
 3. Provide for the recolonization of vacant habitat through trapper education, reintroductions and regulations (if necessary).

<u>Staff Involvement</u>	<u>Months</u>
Project Leader: Brian Slough Harvey Jessup	1.0



Plans for current year:

1. Complete Evelyn Creek Marten study:
 - a. age study animals
 - b. collate home range, population (age, sex, productivity) food habits and habitat data into final report
 - c. derive management recommendations from the study, ie. recommended harvest strategies
2. Initiate a trapper education program on marten management within the "marten conservation area" (see map).
3. Assist one or two trappers with marten introductions to their trapline within the "marten conservation area".

Budget:

YTG: \$1.0 thousand

Cooperators:

Publications, Reports:

1. Annual progress reports (1979 to 1982) by Archibald and Jessup.
2. Archibald, W. R. and R. H. Jessup. 1983. Population dynamics of the prime marten (*martes americana*) in the Yukon Territory. In Press.
3. Beare, S. S. 1983. Small mammal abundance and diversity in south central Yukon, M. Sc. Thesis, Univ. of Alberta, Edmonton. In Prep.
4. Northern Biomes. 1983. Winter ecology of pine marten (*martes americana*) in the south central Yukon Territory, 1980/81. 52 pp.

Report Status for current year: Interim

Final Report due: 1984

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since 1981

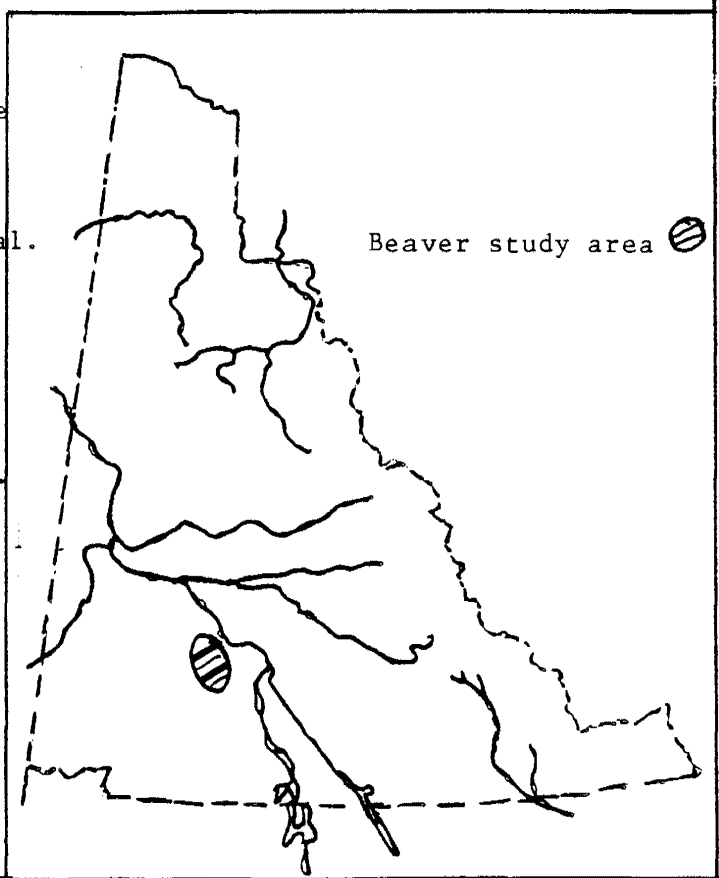
Dates of Field Work _____ District _____ GMZ _____

PROJECT TITLE Biological population monitoring studies - beaver

Cooperating Agencies

Purpose (problem)
A furbearer management goal is to implement harvest strategies which maximize the yield to trappers and conserve species populations. Basic biological and ecological parameters of each species must be known before optimal harvest strategies can be implemented and the effect of present trapping and hunting methods on populations and movements determined.

Objectives
For individual species determine:
1. Population parameters and natural movements.
2. The sex and age biases of alternate trapping and hunting methods.
3. The effect of trapping strategies on population dynamics and dispersal.



<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Brian Slough	1.0
Harvey Jessup	1.0
Phil Merchant	0.5

Plans for current year:

Beaver

1. Sex, age and reproductive analysis of beaver carcasses submitted 1978 to 1982.
2. Examination of 1982-83 beaver pelt data (measurements) for sex and age composition of harvest. They're collected by the Y.T.A. central fur depot.
3. Field studies on beaver population parameters and movements on the Nordenskold River.

Muskrat

1. We are attempting to obtain external funding to finance a graduate student in studies to determine annual allowable harvest levels and preferred temporal and spatial harvest strategies of muskrat.

Budget:

YTG: \$ 10 .0 thousand

Cooperators:

Publications, Reports:

None to date.

Report Status for current year: N/A

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since _____

Dates of Field Work _____ District _____ GMZ _____

PROJECT TITLE
Yukon Furbearer Booklet

Cooperating Agencies

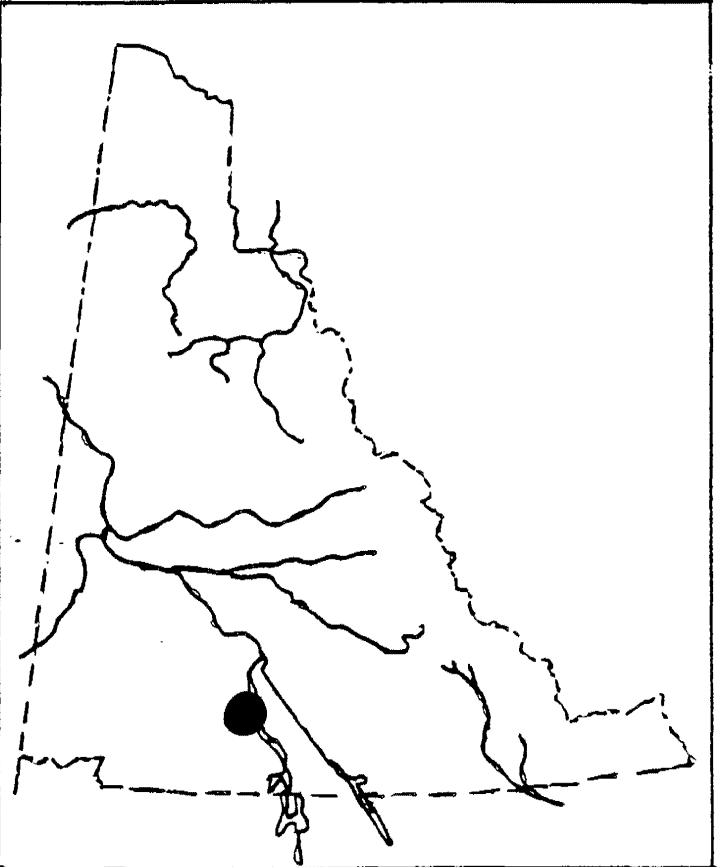
Purpose (problem)

The public awareness of the value of the fur resource and importance to the Yukon economy is low.

Objectives

Promote furbearer management, the trapping industry, and the non-market value of furbearers to Yukon public and trappers.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Harvey Jessup/Brian Slough	1



Plans for current year:

Produce a brochure outlining the importance of the fur industry to the Yukon in the past, present and future; depicting Yukon's furbearers, their biology and distribution; outlining the goals and objectives of furbearer management in Yukon.

Budget:

YTG: \$10.0 thousand

Cooperators:

Publications, Reports:

Yukon Furbearer brochure

Report Status for current year: N/A

Final Report due: March 1984

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since 1982

Dates of Field Work November to March District All GMZ

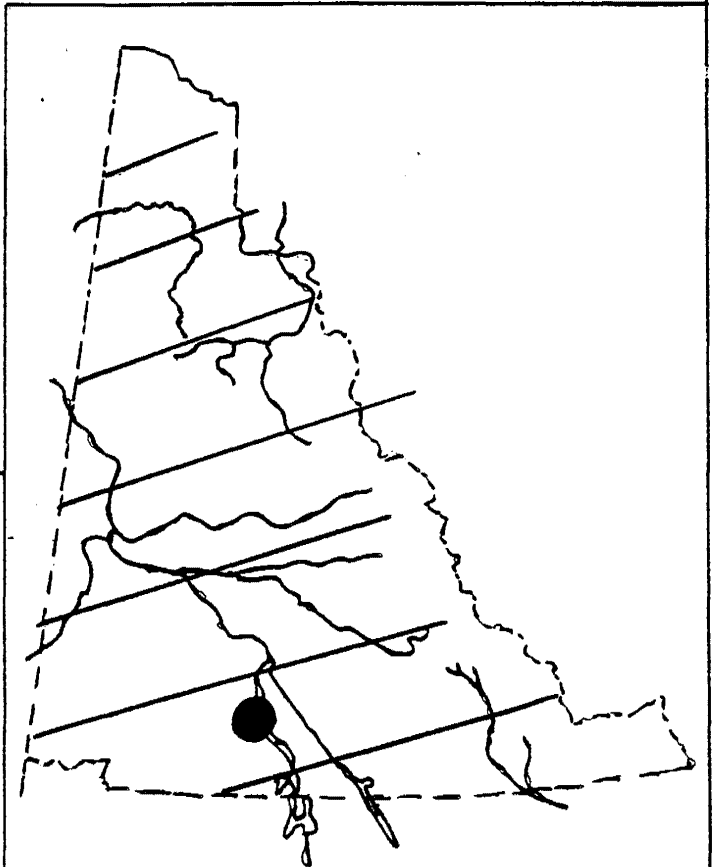
PROJECT TITLE Trap Testing Program

Cooperating Agencies Western Fur Managers Conference

Purpose (problem)
Traps submitted to, and recommended by, the FPCHT were not adequately tested in field conditions. Since the FPCHT is no longer in effect and a National Fur Institute has not yet been formed, the Western Fur Managers Conference has assumed responsibility for a trap testing and development program.

Objectives
Test new traps in field situations in Yukon with the voluntary support of Yukon trappers.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Harvey Jessup	0.5



Plans for current year:

Obtain trap prototypes and supply to trappers. Collate field reports from trappers.

Budget:

YTG: \$0.5 thousand

Cooperators: \$2.0 thousand

Publications, Reports:

Trapper field reports

Annual summary reports

Report Status for current year: N/A

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since 1976

Dates of Field Work _____ District _____ GMZ _____

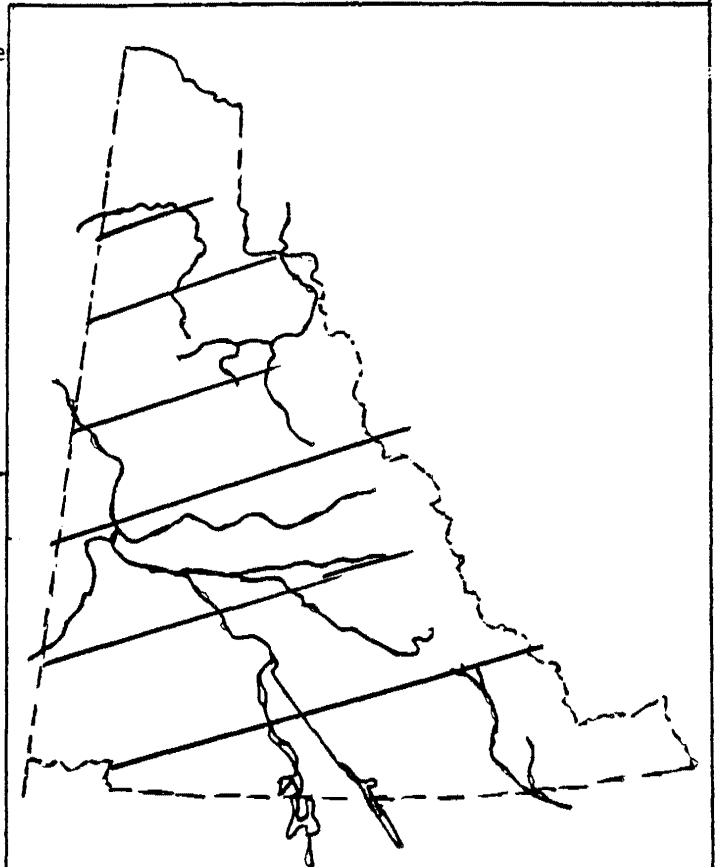
PROJECT TITLE Trapper Education

Cooperating Agencies Yukon College
Yukon Trappers Association
Council for Yukon Indians

Purpose (problem)
Trapper education is a standard tool used nationally to keep trappers abreast with the latest developments in the fur industry. Pressure from the humane trapping sentiment is quickly spelling the end to the use of the steel-jawed leghold trap. Many alternatives are available, however, most trappers are not familiar with these and other changes in the fur industry, such as pelt handling techniques.

Objectives
To provide trappers with the knowledge to effect a biologically sound harvest in the most humane way possible.
To introduce the best methods of pelt preparation in an effort to standardize the techniques.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Harvey Jessup	0.5



Plans for current year:

Still experiencing problems with funding. The Trappers Association has to make more of a commitment. Part of their Special ARDA grant was ear-marked for trapper education.

At least three courses are planned, in Pelly Crossing, Ross River and Carmacks.

Budget:

YTG: \$ 2.0 thousand

Cooperators: \$ 5.0 thousand

Publications, Reports:

Evaluation Reports

Report Status for current year: Annual

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Furbearer Management New Continuing Since 1977

Dates of Field Work _____ District _____ GMZ _____

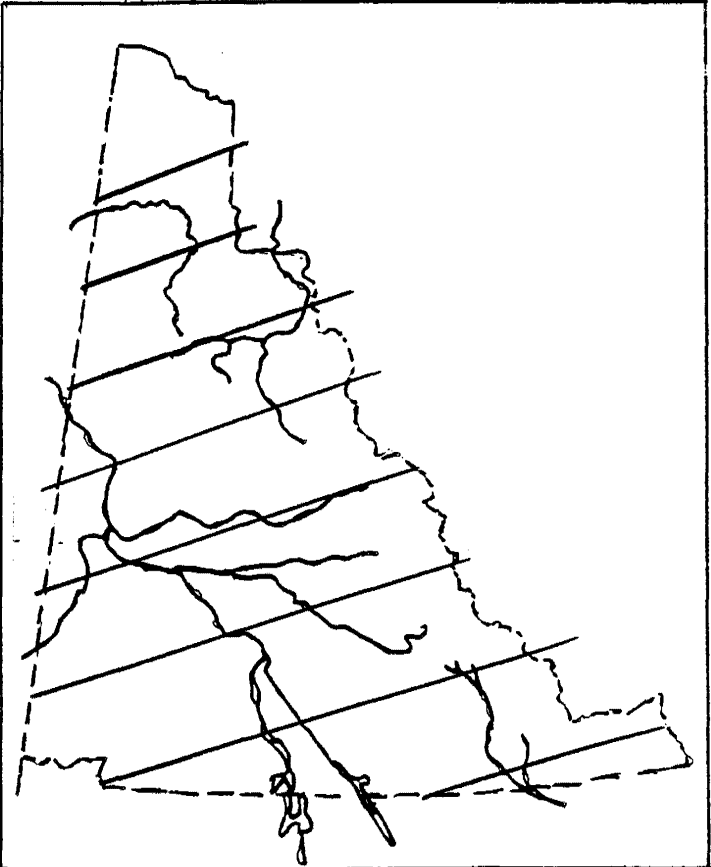
PROJECT TITLE
Trapper Questionnaire

Cooperating Agencies

Purpose (problem)
Furbearer and small game populations are difficult to monitor on territorial and regional scales. Information from questionnaires will compliment information obtained from inventory and fur harvest data.

Objectives
Obtain subjective information on furbearer and small game population levels and trends annually from all active trappers.

Staff Involvement



<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Brian Slough	0.5
Karen Mueller	0.5

Plans for current year:

The 1983 questionnaire will be mailed to all licensed trappers in May and June (second mailing). Prizes have been donated by four Whitehorse businesses with interests in trapping.

Budget:

YTG: \$ 1.0 thousand

Cooperators: \$ 0.5 (prize donations)

Publications, Reports:

Slough, B. G. 1982. Trapper Questionnaire Analysis. Y.T.G. Unpub. Rep.

Report Status for current year: Interim

Final Report due:

BIRD
MANAGEMENT

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bird Management New Continuing Since 1973

Haines Jct.
Watson Lake

Dates of Field Work May 1-12 District Dawson GMZ 6, 10, 2, 1
North Coast

Project Title Upland game bird annual census and harvest analysis.

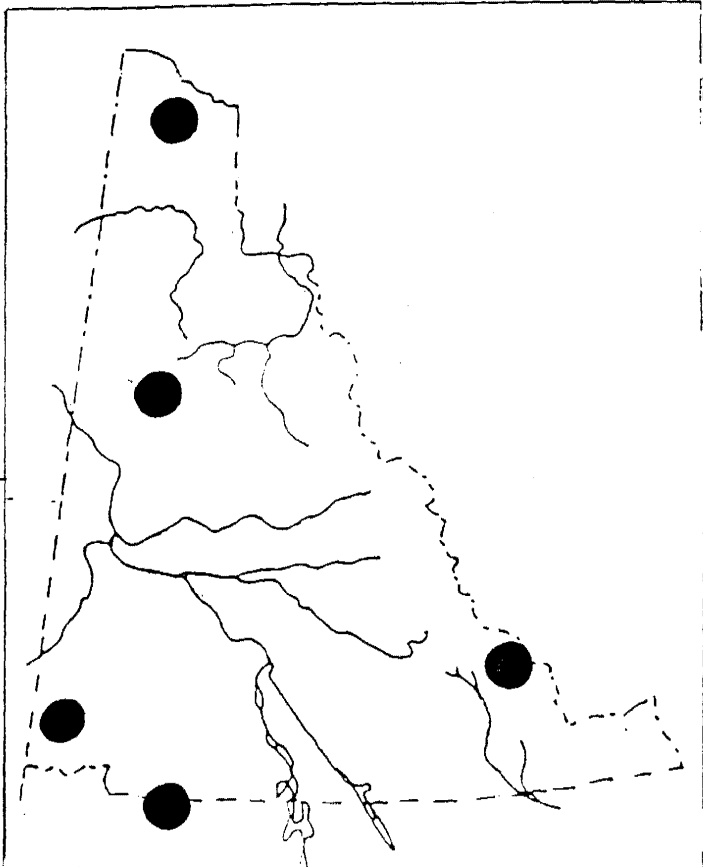
Cooperating Agencies

Purpose (problem)

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 declined in the Yukon.

Objectives

1. To measure the density trend of 4 reference populations of Willow ptarmigan.
2. To measure age composition of wintering willow ptarmigan.
3. To monitor sharp-tailed grouse density at two dancing grounds in the Donjek River population.
4. to summarize harvest data 1978-1982.



Staff Involvement Months

Project Leader:

D. Mossop 1

Plans for current year:

Three ptarmigan counts will be done by total ground search using a pointing dog. Two km² areas 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.

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.

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

Budget:

YTG: \$1.5 thousand

Cooperators:

Publications, Reports:

1976 Resident Harvest Results - Upland Game Birds and Migratory Birds
Y.T.G. Report.

Report Status for current year: due December 31, 1983

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bird Management New Continuing Since _____

Dates of Field Work June 20-25 July 15-20 District Old Crow Whitehorse GMZ 1

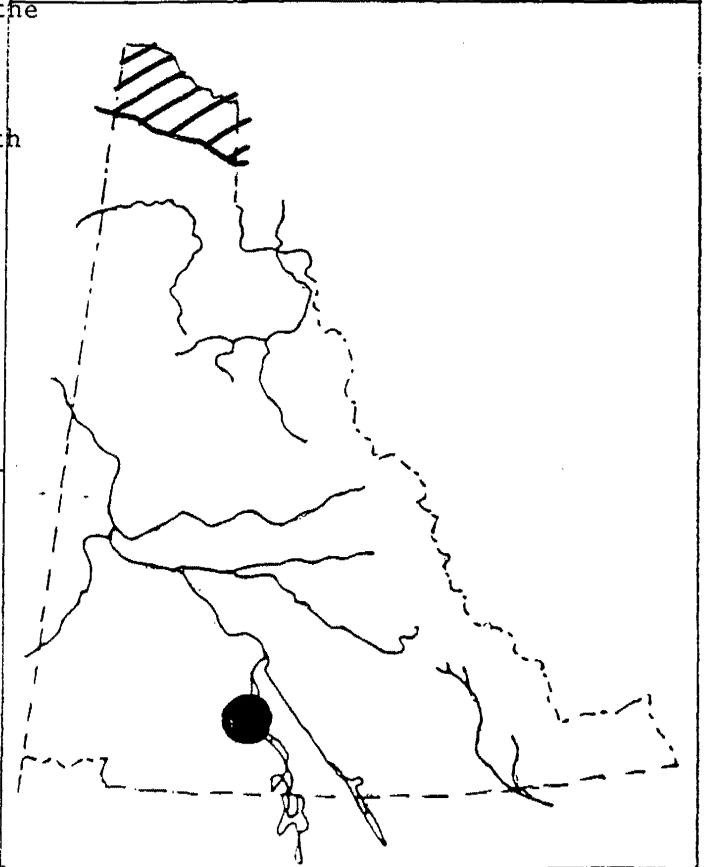
PROJECT TITLE Peregrine falcon recovery project (b)
Tundra peregrine falcon reintroduction project

Cooperating Agencies Polar Continental Shelf; C.W.S.: McGill University;
Yukon Game Farm

Purpose (problem) The tundra subspecies of peregrine declined sharply in the 70's on the Yukon N. Slope and disappeared as a breeding species in 1980. Three pair are being held at Whitehorse and other pairs are held at McGill University. The reintroduction of the bird will require new techniques of cross-fostering to be developed.

Objectives 1. To successfully raise young tundra peregrine falcons at the Whitehorse facility and negotiate for possible additional birds from breeding stock in Quebec.

2. Resurvey peregrine habitat on the North Slope and select an area for cross-fostering experiments.
3. Carry out initial fostering with gyrfalcon parents.



Staff Involvement

	<u>Months</u>
<u>Project Leader:</u>	
D. Mossop	1
Casual Technician	1

Plans for current year:

A. Breeding facility: During the winter months, the male tundra peregrines from the breeding facility were handled daily and hand fed in an attempt to calm them to the presence of people. This is hoped to enhance their breeding behavior. Three pairs will be placed in breeding chambers, they will be forced to lay extended clutches and any fertile eggs will be shared between active pairs. The Yukon Game Farm will supply avicultural services as in other years, under contract.

B. Additional breeding stock: Attempts are continuing to obtain tundra peregrines held in captivity at McGill University or to obtain young they may produce.

C. The field portion of the project will commence this year with the selection of gyrfalcon aeries suitable for cross-fostering experiments. An attempt is being made to develop this phase as a graduate thesis project perhaps funded by outside funding agencies.

Budget:

YTG: \$6.0 thousand

Cooperators: \$24.0 thousand (firm)
\$12.0 thousand (pending)

Publications, Reports:

Annual reports since 1974.

1980 N. A. Peregrine Falcon Survey: Yukon section (in press).

Mossop, D. 1982. Peregrine Falcon Recovery Project. Y.T.G. Report.

Report Status for current year: Due November 1983

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bird Management New Continuing Since 1978

Dates of Field Work June 1 - August 1 District Dawson GMZ 2 & 3

PROJECT TITLE

Peregrine Falcon recovery project (a) Anatum fostering Yukon River

Cooperating Agencies

C.W.S. Western Raptor Committee

Purpose (problem)

The peregrine falcon is an endangered species in Canada and throughout North America. The disappearance of the Peregrine from most of its former range in the 1960's, apparently from pesticide poisoning left a small remnant population in the Yukon River valley. Since 1978 the Yukon has been closely monitoring the remaining nests and supplementing productivity with captive bred young. The population is now recovering and efforts continue to bring back former numbers. More recently, the birds have been attracting illegal activities which must be curtailed. As well, pesticide levels have apparently remained high.

Objectives

1. To monitor the state and productivity of the Yukon River peregrine falcon population.
2. To gather information on the prey resource being used by peregrines and its pesticide residue levels.
3. To carry out fostering of up to 10 young with wild adult pairs.
4. To carry out surveillance of human activities near peregrine nest sites.

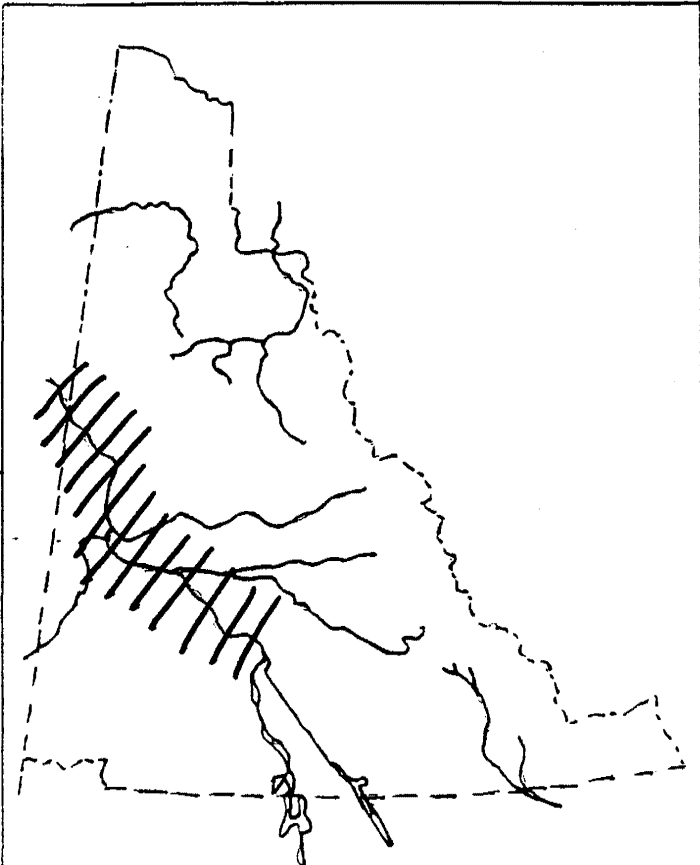
Staff Involvement

Months

Project Leader:

D. Mossop 2

Casual technician 2



Plans for current year:

A casual wildlife technician will be situated on the Yukon River through June and July. An attempt will be made to visit all nest sites determining whether they are occupied in early June. The exact location of the nest ledges will be determined and various behavioral observations of the adults will be made to support the fostering process which will be carried out in early July. All nests, including those with supplemented production will be monitored through to fledging. At the fostering period, prey remains will be collected from all nest ledges and all young will be banded. Throughout the period, nest surveillance will be conducted utilizing remote camera and other apparatus.

Budget:

YTG: \$ 3.5 thousand

Cooperators: \$60-70 thousand

Publications, Reports:

Annual reports since 1978

Mossop, D. and P. Dennison. 1982. Peregrine Falcon Recovery Project.
Y.T.G. Report.

Report Status for current year: due November 1983

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bird Management New Continuing Since 1981

Dates of Field Work June 20-25 District N. Slope GMZ 1

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

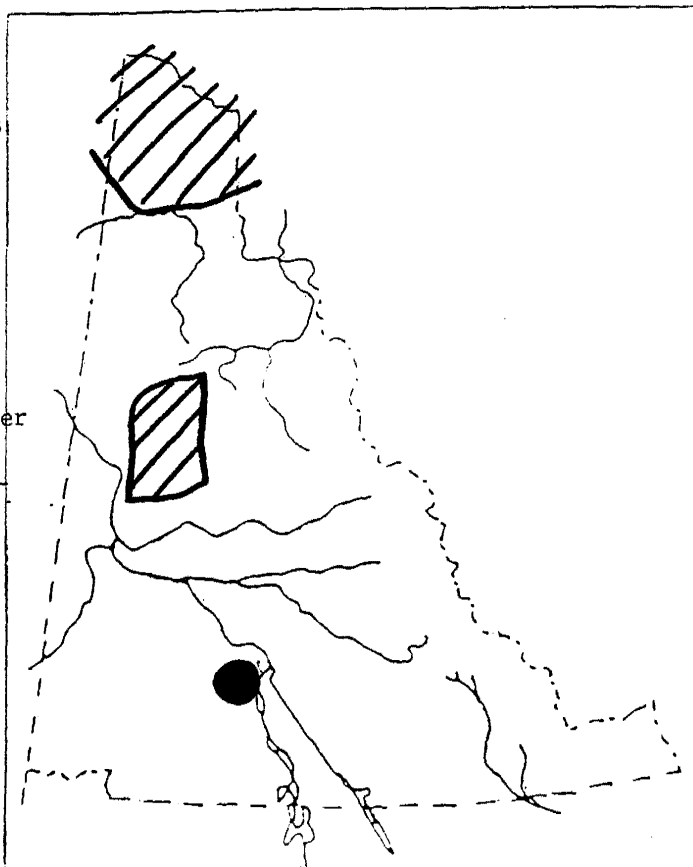
Cooperating Agencies Polar Continental Shelf, U.B.C.

Purpose (problem)

Gyrfalcons currently have 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, interpretation and realistic enforcement protection.

Objectives

1. Continue low level harvest, monitoring effect on population.
2. Identify legal and other problems with the trade in rare birds of individuals.
3. To assist Yukon residents in producing captive-bred gyrfalcons for market values.
4. To produce published account of research conducted by U.B.C. researcher on gyrfalcon ecology with Ogilvie Mountain study area.



Staff Involvement Months

Project Leader:

D. Mossop 1

Student technician .5

Plans for current year:

The North Slope population will be monitored in a minimum survey to assess production. Four to six young will be harvested as breeding stock for captive breeding facilities. Close cooperation with jurisdictions involved will be maintained principally through the Western Raptor Committee. U.B.C. Researcher, N. Barichello, will be completing his thesis in the current year and will be writing published accounts of his work on early nesting ecology.

Budget:

YTG: \$3.5 thousand

Cooperators: \$ 15.0 thousand

Publications, Reports:

Annual reports since 1981

Mossop, D., N. Barichello, R. Hayes. 1982. Gyrfalcon Management Project.
Part 1: Harvest; Part 2: Private captive breeding; Part 3:
Population research. Y.T.G. Report.

Report Status for current year: Due December 31, 1983

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bird Management New Continuing Since _____

Dates of Field Work June 15-Aug. 31 District Dawson GMZ 2-1

Project Title Dempster corridor bird of prey interpretive program.

Cooperating Agencies

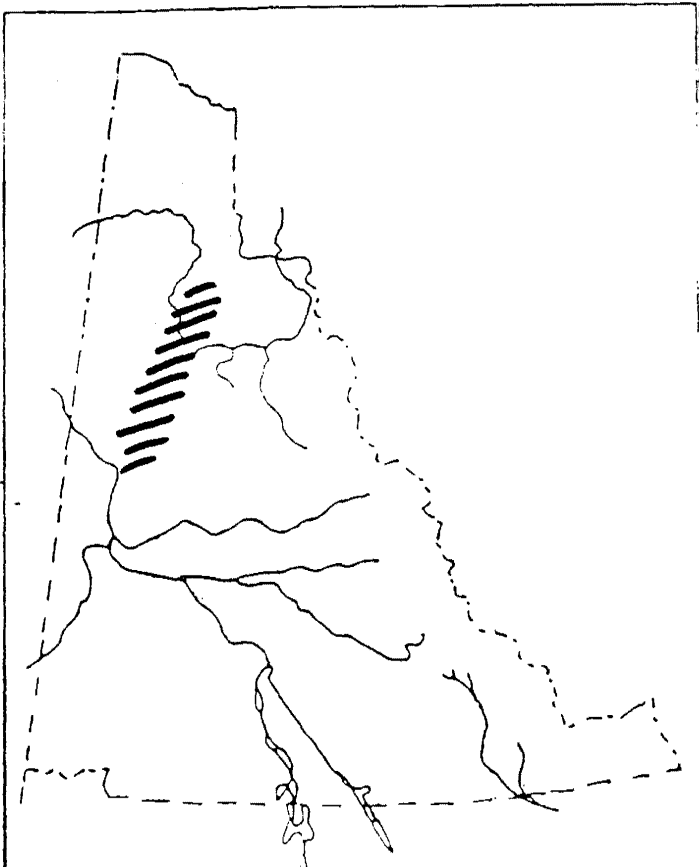
Dempster Management Committee

Purpose (problem)

The Dempster corridor has been completely surveyed for nesting birds of prey. An inordinate density of rare birds was identified. It is probable that 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.

Objectives

1. To assess the potential for interpretive program on birds in the corridor.
2. To begin habitat manipulation to enhance and stabilize viewing opportunity for rare birds of prey.
3. To provide protective surveillance for nesting raptors.
4. To design interpretive material including a brochure, interpretive signs and site specific interpretive philosophy.



Staff Involvement

Months

Project Leader:

D. Mossop	0.5
Casual Technician	0.5
Contract Technician	3.0

Plans for current year:

A casual technician will be assigned to the project throughout the summer months to carry out continuous field coverage. The initial year will focus on assessing public interest and potential. A questionnaire will be used to interview tourists about anticipation for viewing rare wildlife. Experimental nesting structures will be deployed for Kestrels, hawk-owls and bald eagles. One gyrfalcon aerie will be improved. Constant surveillance of human activity will be carried out near all vulnerable nesting sites.

Budget:

YTG: \$8.0 thousand

Cooperators:

Publications, Reports:

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

Report Status for current year: Due December 31, 1983

Final Report due: 1985

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bird Management New Continuing Since 1974

Dates of Field Work June 1-July 31 District Old Crow GMZ 1

Project Title Raptor population monitoring/productivity/pesticide data gathering.

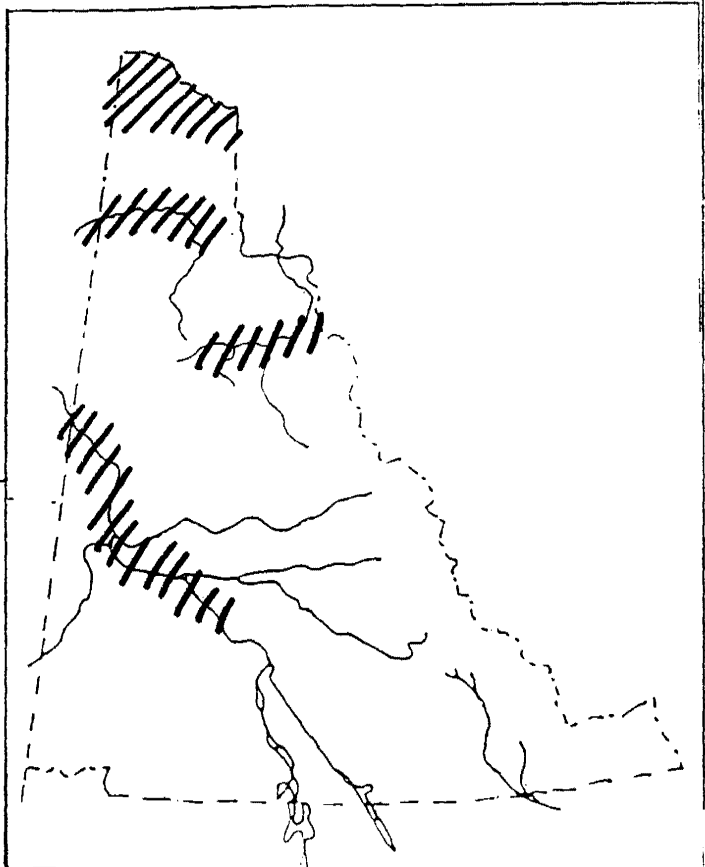
Cooperating Agencies
C.W.S., Polar Continental Shelf

Purpose (problem)

Following initial inventory, significant populations of rare and endangered or highly valuable falcons are identified for periodic monitoring of their status and productivity. This process is essential for assessing the effects of management programs with these birds. A major monitoring survey is conducted every 5 years; in 1983, monitoring will be conducted in only 4 drainages.

Objectives

1. To monitor nesting occupancy and productivity of 4 peregrine falcon populations and one gyrfalcon population.
2. To band young peregrine falcons prior to fledging in 3 drainages.
3. To collect pesticide data in eggs and adults whenever possible.



<u>Staff Involvement</u>	<u>Months</u>
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Project Leader:

D. Mossop	1
R. Hayes	1
Casual Technician	0.5
Conservation Officer assistance (as required)	

Plans for current year:

Four populations, the North Slope, the Yukon main stem, the Porcupine River and the Peel River will be initially surveyed for occupancy in conjunction with other ongoing projects. Followup surveys for production of young, banding and collection of pesticide data will be conducted in the Porcupine, Peel and Yukon River groups. The late surveys will be conducted by boat; all nests will be visited, prey remains collected, and young banded. Unhatched eggs will be collected, shells collected and whenever possible, adults will be captured and blood samples taken. Coordination with Alaska researchers will be pursued. Analysis of pesticide residues will be conducted by C.W.S. labs. During all these monitoring surveys, enforcement and protective surveillance capability exists. In specific instances, more sophisticated remote surveillance apparatus will be deployed. All data collected is entered in the Yukon raptor data bank developed in 1982 for the Y.T.G. computing system.

Budget:

YTG: \$ 1.0 thousand

Cooperators: \$ 10.0 thousand

Publications, Reports:

1980 N.A. Peregrine Falcon survey. Yukon segment (in press). D. Mossop.

Hayes, R. 1982. Raptor population data storage and retrieval system - Y.T.G. Report.

Report Status for current year: Due November, 1983

Final Report due: N/A

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bird Management New Continuing Since 1978

Dates of Field Work August 1-October 31 District Teslin GMZ 10

Project Title The Nisutlin Delta, its use by waterfowl and other birds during fall staging.

Cooperating Agencies

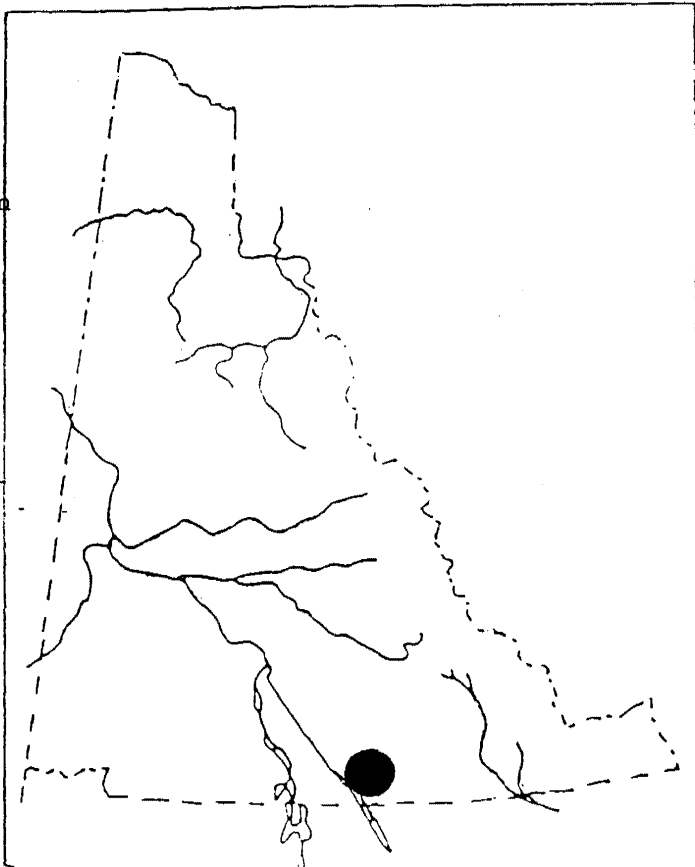
Yukon River Basin Study

Purpose (problem)

The Nisutlin Delta is the most important fall staging area in the Southern Yukon and an important waterfowl harvest site. Planning for its management and management of similar less well known fall staging sites is a priority for decision making in the Yukon River Basin.

Objectives

1. To measure waterfowl use, timing and movement patterns on the area.
2. To identify critical habitat components.
3. To determine the relation between hydrological processes and use by waterfowl.
4. To extrapolate findings where possible to similar system throughout the basin.



Staff Involvement

Months

Project Leader:

D. Mossop	1
Casual student	3

Plans for current year:

The project is based on one M.Sc. student funded by the Yukon River Basin study and supported logistically by Y.T.G. A field camp is established and manned from August 1 to October 31. Direct observation from observation towers is used to record waterfowl numbers and movements. Habitat has been mapped from low level 35 mm. coverage. Water levels and exposed habitat are measured through standard gauge readings and oblique air photos. Banding of ducks occurs through the fall at one bait station. Raptor numbers are monitored weekly with the use of a live pigeon. Abundance of other birds is recorded weekly.

Budget:

YTG: -0- thousand

Cooperators: 10.0 thousand

Publications, Reports:

Annual reports since 1981

Coleman, T. 1982. Nisutlin Delta project 1982 interim report. Yukon River Basin report.

Report Status for current year:

Final Report due: December 31, 1983

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Bird Management New Continuing Since 1974

May 20-30
Ross River
Dawson

Dates of Field Work July 15-18 District Watson Lake GMZ 4, 2, 10

Project Title Wetland inventory and development of Yukon Waterfowl Management Plan.

Cooperating Agencies

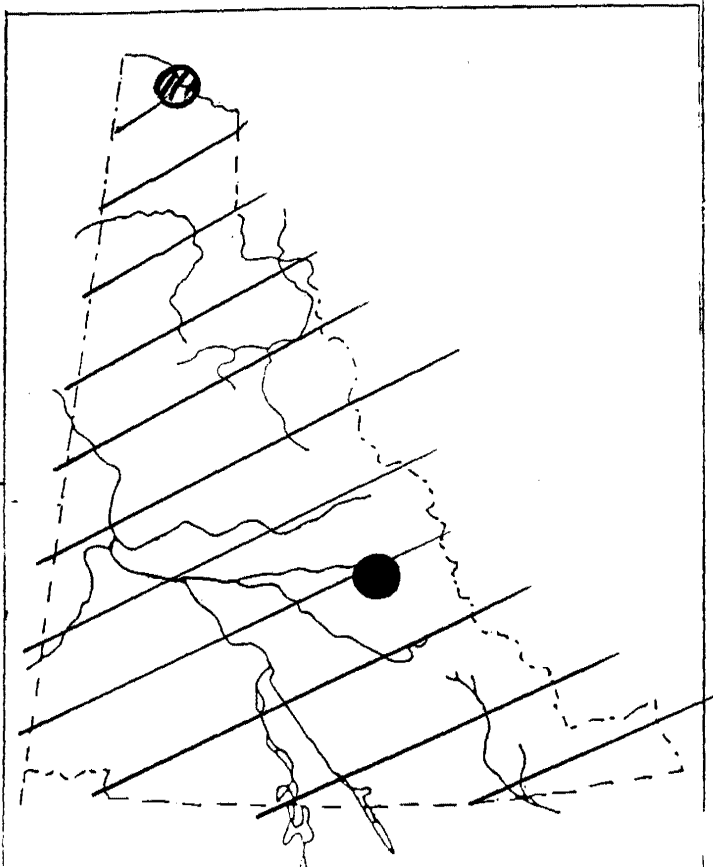
C.W.S.
Ducks Unlimited (Canada) Ltd.

Purpose (problem)

Project is a cooperative effort of the Yukon Waterfowl Technical Committee members and addresses data needs and management requirements for waterfowl in the Yukon. Initial inventory of wetland areas (80-90% complete) must be followed by basic analysis of duck use, activities occurring and critical components being examined in terms of protection necessary, possible habitat manipulation, etc.

Objectives

1. Determine numbers and timing of waterfowl use in identified wetlands.
2. To engage in initial discussions toward cooperative management with Ducks Unlimited (Canada) Ltd.
3. Produce draft of Yukon Waterfowl Management Plan.



Staff Involvement

Months

Project Leader:

D. Mossop

1

Plans for current year:

The Sheldon Lake complex will be revisited to determine early summer use and late summer staging. New surveys for wetland complexes, especially in the Tintina Trench migration route will be conducted incidentally and other projects. A comprehensive reconnaissance of wetlands throughout the Territory will be given to Ducks Unlimited personnel and management potential will be discussed in terms of a cooperative program. (Original plans to conduct a C.W.S./Yukon cooperative project at Phillip Bay on the Arctic coast have been terminated due to lack of C.W.S. support).

Budget:

YTG: \$ 2.5 thousand

Cooperators:

Publications, Reports:

Dennington, M. and D. Mossop 1982. North Canal Road area wetlands survey 1981-82. C.W.S. Report.

McKelvey, R., M. Dennington, D. Mossop 1982. The status and distribution of Trumpeter swans in the Yukon. Arctic 36(1):76-81.

Report Status for current year:

Final Report due: December, 1983

WOLF
MANAGEMENT

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Wolf Management* New Continuing Since 1982

Dates of Field Work May 15-June 15 District Southern Yukon GMZ 7 & 9

*Portion of non-game/endangered species management program.

PROJECT TITLE
Wolf Population Studies -effects on ungulate populations, southern Yukon.

Cooperating Agencies

Purpose (problem)

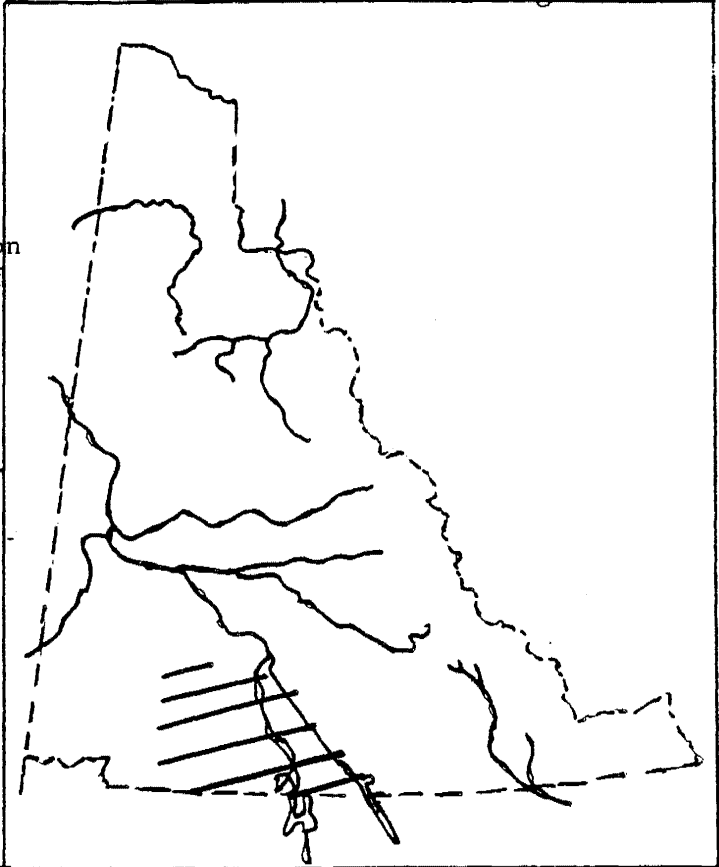
In an attempt to address potential predatory relationships of wolves with large ungulate populations, it is necessary to describe the biology and population ecology of these carnivores.

This study addresses various ecological and population parameters of wolves in the southern Yukon through various methods including radio telemetry, trapper liason, necropsy analysis and predation studies.

Objectives

1. To describe the territorial requirements of wolves in the study area.
2. To describe population ecology of wolves in relation to ungulate populations, especially moose and sheep.
3. To identify predatory habits and predation rates of wolves in the study area.
4. To measure and monitor population trends, condition and fitness of wolves.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
R. Hayes	6.0
P. Merchant	2.0
Casual technician	2.0



Plans for current year:

- continue radio telemetry studies to identify range requirements, territorial dynamics, denning habits, reproductive rates of wolves.
- identify winter predation habits and rates in 1-2 study packs for period of 10 days.
- analyze carcass submissions by trappers to monitor any population shifts caused by human depredation.

Budget:

YTG: \$26 thousand

Cooperators:

Publications, Reports:

Population status, territoriality and predatory behavior of wolves in the Coastal Mountains, Southern Yukon.

Report Status for current year: interim

Final Report due: 1984

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Wolf Management * New Continuing Since 1982

Dates of Field Work January -December District South Yukon GMZ 7&9

* Portion of non-game/endangered species management program

PROJECT TITLE Wolf Population Inventory - Southern Yukon (Zone 7-9)

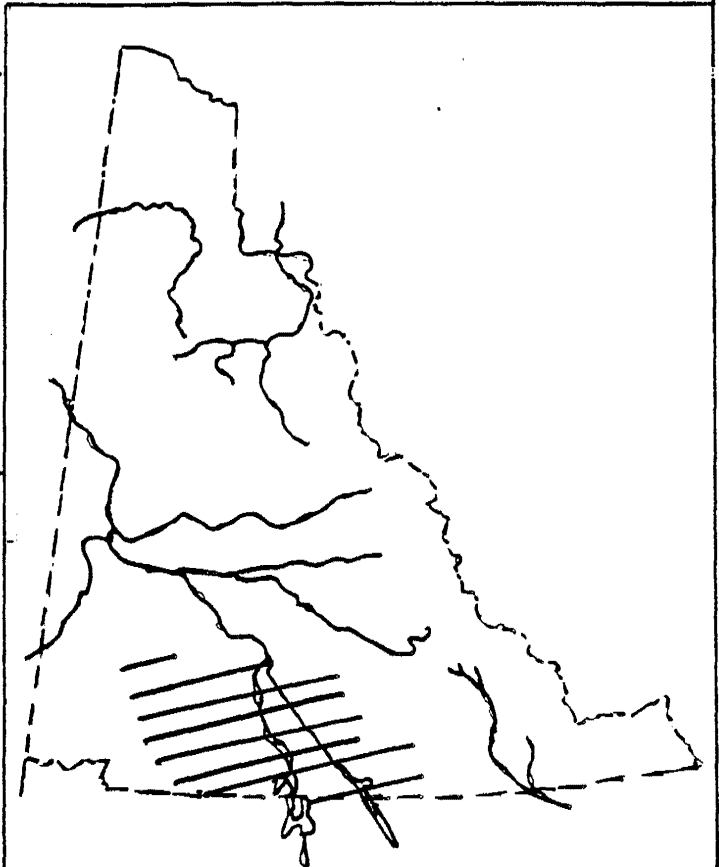
Cooperating Agencies

Purpose (problem)

Severely depressed moose calf survival has been identified as a critical problem in the southern Yukon moose population. In an attempt to identify potential mortality causes, a wolf population inventory was designed and carried out the winter of 1982-83. Surveys will be continued and expanded in 1983-84. Results from these surveys will generate a wolf/moose ratio, which will be implemented in a management strategy to address the calf recruitment problem.

Objectives

1. To measure the numbers and densities of wolves in Zone 9 and 7.
2. To develop a relative density (ratio) measurement for wolves and ungulates in the study area.
3. To devise criteria on which to base sound and responsible wolf management policies.



<u>Staff Involvement</u>	<u>Months</u>
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Project Leader:

R. Hayes 3.0

P. Merchant 1.5

Plans for current year:

A 10,000 mi² area including Zone 9-Zone 7 and parts of Zone 8 and 5 will be surveyed in the winter of 1983-84 to census wolf² populations in the entire study area. To date, approximately 2500 mi² have been intensively surveyed for wolves. The following survey will allow us to monitor population changes between 1982-83-84.

Budget:

YTG: \$10 thousand

Cooperators:

Publications, Reports:

The Southern Yukon Wolf Inventory Report (1982-83)

Report Status for current year: data under analysis (interim report)

Final Report due: October, 1983.

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Wolf Management*

Continuing

Since 1983

Dates of Field Work March 1984

District Ross River

GMZ 11

* Portion of non-game/endangered species management program.

PROJECT TITLE Finlayson Management Area: Wolf population monitoring and management.

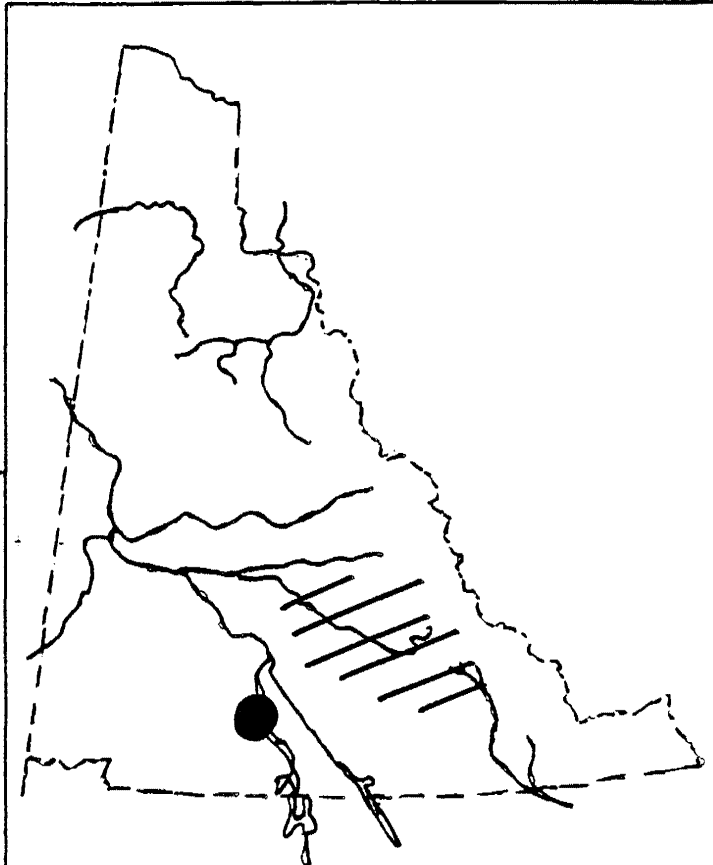
Cooperating Agencies

Purpose (problem)

In cooperation with, and under the direction of R. Farnell, the wolf population reduction in the Finlayson management area will be monitored with our assistance through wolf pack necropsy analysis. Field assistance will be available to cooperate in the management program.

Objectives

1. To monitor population structure changes in wolf population occupying Finlayson management area throughout management period.
2. To describe winter food habits of wolves through necropsy analysis and kill site analysis.



Staff Involvement

Months

Project Leader:

R. Farnell	
R. Hayes	1 month
P. Merchant	1 month
Technician	1 month

Plans for current year:

Continue to measure various physical parameters of wolves collected through R. Farnell's management program, including physical condition taxonomic measurements, productive conditions and age and sex classes of packs.

Assess predation habits of wolves through stomach analysis and kill site observations.

Budget:

YTG: \$1.0 thousand (materials for laboratory analysis)

Cooperators:

Publications, Reports:

Projected.

Status of wolves in the Finlayson management area 1982-1983.

Report Status for current year: Final

Final Report due: November, 1983.

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Wolf Management* New Continuing Since _____
 March - April 1984
 Dates of Field Work _____ District Watson Lake GMZ 10 & 11

*portion of non-game/endangered species management program.

PROJECT TITLE Liard Drainage Wolf Inventory Project.
 (Proposed new project)

Cooperating Agencies

Purpose (problem)

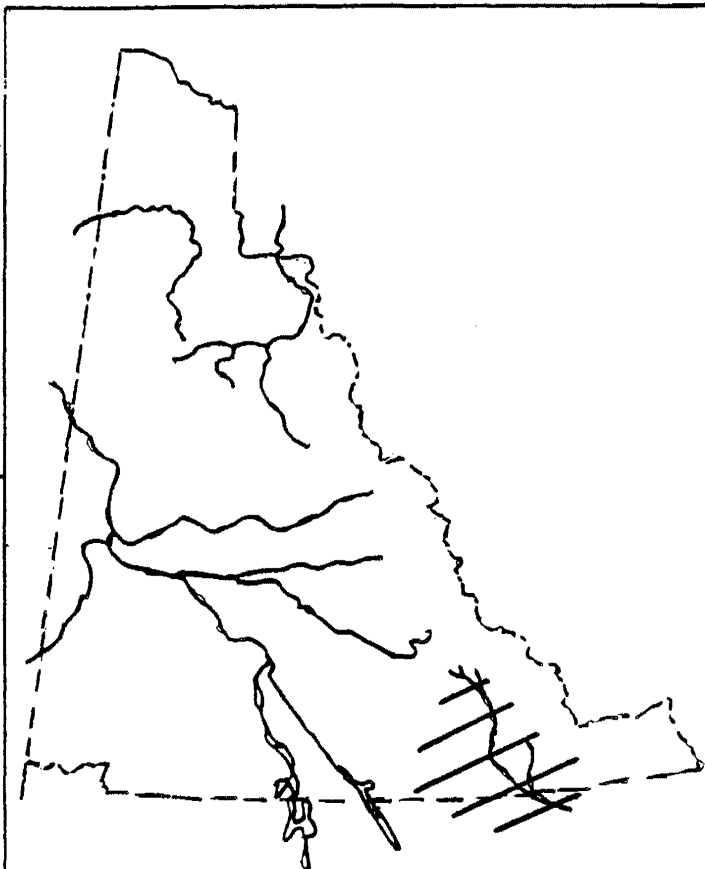
A potential moose-predator problem exists in the Liard River Basin. As a preliminary measure, and in cooperation with related ungulate research in the area, a wolf survey is proposed to identify wolf densities, pack composition and territorial requirements in this priority area.

Objectives

To measure the numbers and density of wolves occupying the Liard River Basin in southeast Yukon.

To compare densities with known wolf populations from surrounding areas.

To collect any incidental information regarding wolf predatory habits in the area.



<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
R. Hayes	.5

Plans for current year:

1. Conduct survey for wolves during the winter of 1983-84 in a 6,000 mi² area of the Liard Basin to enumerate wolf populations, pack composition, pack size and winter hunting habitat.
2. collect specimens from wolf killed ungulates to assess age/sex class prey selection by wolves.

Budget:

YTG: \$2.0 thousand

Cooperators: \$4.0 thousand

Publications, Reports: (projected)

The Liard River Basin Wolf Inventory. 1983-84

Report Status for current year: interim

Final Report due: 1985

HABITAT ASSESSMENT/

LAND USE

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Habitat Assessment/ Land Use: New Continuing Since August, 1982

Dates of Field Work Summer 1982, 1983 District Whitehorse GMZ 10
(Teslin)

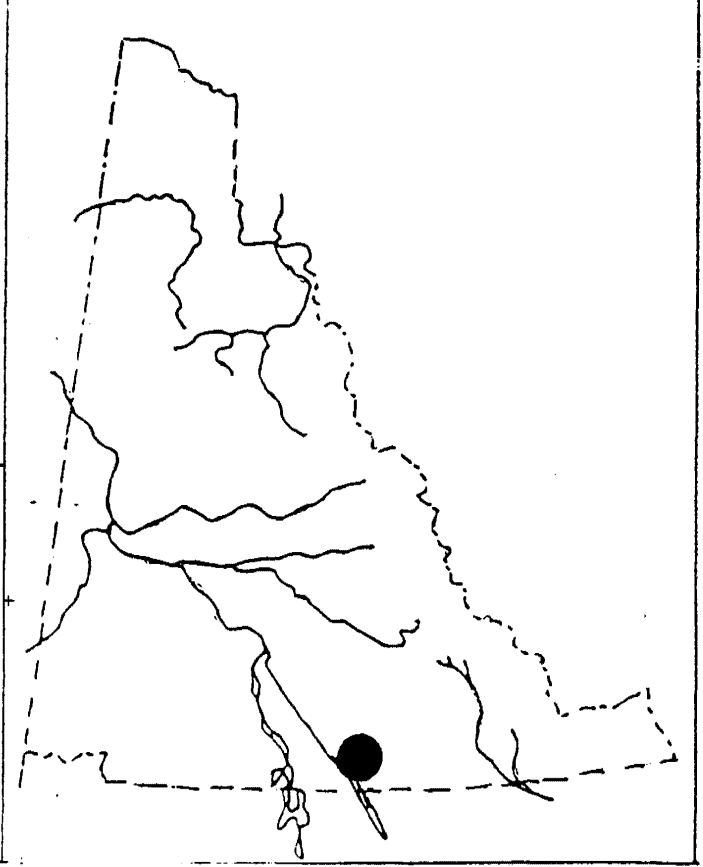
PROJECT TITLE Habitat/vegetation component of: Nisutlin Delta Waterfowl Staging Study-Yukon River Basin Study (see BIRD MANAGEMENT)

Cooperating Agencies Canadian Wildlife Service
Yukon River Basin Study

Purpose (problem) The Nisutlin Delta is the most important waterfowl staging and waterfowl hunting area in the S. Yukon. A study designed by the departments Bird section to provide data of management importance has been ongoing on the delta since 1978. One objective of this study-to identify critical habitats and measure parameters of their use by wildlife-requires a detailed map of the present vegetation communities. This map will be compared with another deligniating waterfowl feeding areas and with information collected from exclosure plots in areas visited by grazing geese. Preparation of the vegetation map is being undertaken at present by the Habitat and Bird Sections of the Department.

Objectives
To prepare a detailed vegetation map of the Nisutlin Delta for use in the Nisution Delta Waterfowl staging study.

To upgrade vegetation mapping and remote sensing skills of habitat section.



Staff Involvement Months
Project Leader:
Beth Ereaux 0.75
Dave Mossop } Advisors
Bob Hayes }

Plans for current year:

35 mm colored air photographs were taken of the Nisutlin Delta in August 1982. Construction of a mosaic using these photos will be complete by June 1983, as will deligniation and mapping of existing vegetation community boundaries. Descriptions of the ten initial communities will be finalized with limited ground truthing this August.

Budget:

YTG: Nil

Cooperators:

Publications, Reports:

Ereaux, B. 1982. Project Interim Report, October 1982. Y.T.G. Unpub. Report.

(See also Bird Management Project: Nisutlin Delta Waterfowl Study - Yukon River Basin Study)

Report Status for current year: Final map and community descriptions

Final Report due: Fall 1983

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Habitat Assessment/ Land Use New Continuing Since April 1982

Dates of Field Work Summer 1982 Winter 1983 District Whitehorse GMZ 7 (8,9, 10)

PROJECT TITLE Extension of: Mountain Sheep Critical Winter Habitat Project - Southern Lakes Study Area

Cooperating Agencies

Purpose (problem) A one year project by the above title was funded from April 1, 1982 to March 31, 1983 by the Subsidiary Agreement on Renewable Resources Development. The objectives of the project were:

1. To undertake detailed terrain investigation of several sheep critical wintering areas in the Southern Lakes study area in an effort to develop the methodology for the prediction and/or assessment of other such areas.
2. To assess the value of the Southern Lakes Ecological Land Survey as the data base for making these predictions.

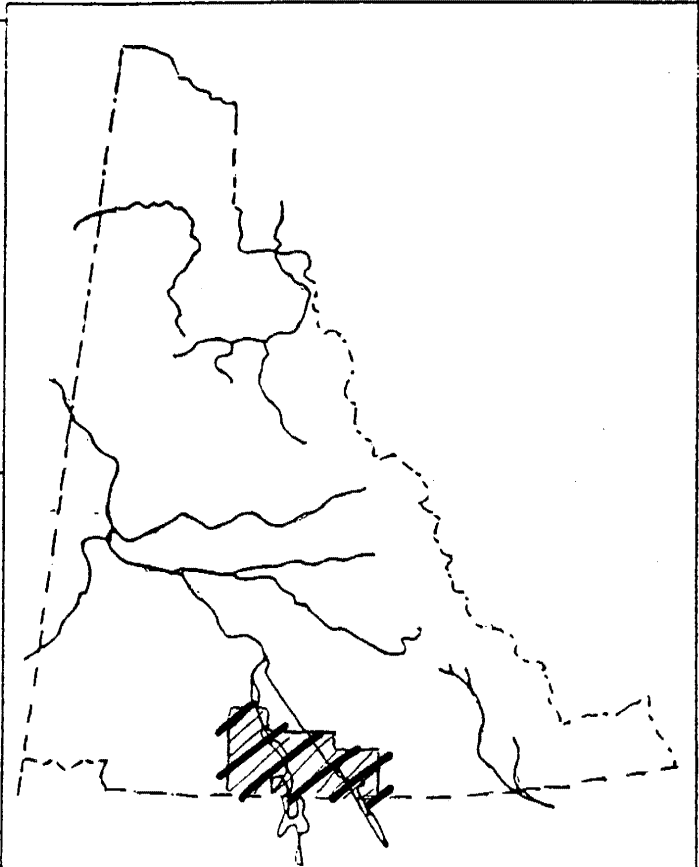
Results of that project were valuable but preliminary, and suggestions were made for further work designed to refine the methodology described. This work will be undertaken in house by the Habitat Biologist and will shed more light on the concept of critical wildlife habitat assessment in general.

Objectives

To refine the methodology for the assessment and inventory of sheep critical winter habitat in the Southern Lakes Study area.

To assess the computer capability of the Southern Lakes Ecological Land Survey (E.L.S.) with regards to this habitat assessment.

<u>Staff Involvement</u>	<u>Months</u>
Project Leader:	
Beth Ereaux	1.0+
Joe Kuhn } Sheep Bio } E.L.S. Staff }	Advisors



Plans for current year:

Ongoing work will involve cooperation of the Habitat Biologist with the Land Use Specialist, Sheep Biologist and E.L.S. Staff. The results of the March 1983 sheep surveys will be transferred to the 1:100,000 Southern Lakes base maps and overlaid on the E.L.S. polygons. Computer analysis of the biophysical data for polygons used by sheep will strengthen our criteria for assessing critical winter habitat. The computer graphics should be functional by June and attempts will be made to predict and map other wintering areas (the manual mapping undertaken in the preliminary phase of the project was particularly time consuming). As the assessment methodology is refined, efforts will likely extend to other wildlife species in the Southern Lakes.

Budget:

YTG: Nil

Cooperators: Nil

Publications, Reports:

Ereaux, B. 1982/3 Mountain Sheep Critical Winter Habitat Project - Southern Lakes Study Area. INTERIM REPORT, October, 1982. FINAL REPORT, May, 1983. Y.T.G. Unpubl. reports.

Report Status for current year:

Extension work

Final Report due:

Fall 1983

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Habitat/Land Use New Continuing Since April 1983

Dates of Field Work May-August District Ecoregions 1, 2 & 3 GMZ 10 & 11

Project Title	
Southeast Yukon Resource Inventory	
Cooperating Agencies	
Canadian Wildlife Service, Ducks Unlimited (Tentative)	
Purpose (problem)	
Develop baseline resource (renewable and non-renewable) and land use information for use in development review and wildlife management.	
Objectives	
Update critical habitat information contained in the federal government's Land Use Information Series. This information was compiled 10 years ago.	
Develop map file information on the above and mining, forestry and agricultural resource development.	
Some new information on high value recreation sites will be developed.	
Staff Involvement	Months
Project Leader:	
Joe Kuhn	30 days
Beth Ereaux	45 days
Technicians	3 months

Plans for current year:

1. Review existing information.
2. Interview local guides, trappers, etc., biologists, c/o's, pilots.
3. Search government and private land use records.
4. Fly field checks on above information.
5. Develop map file.

Budget:

YTG: \$31.7 thousand

Cooperators: C.W.S. \$2,000

Ducks Unlimited \$3-4,000 (tentative)

Publications, Reports:

1. Map file
2. Map reproductions

Report Status for current year:

Final Report due: March 31, 1984

BIOMETRICS

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1. Non Resident Harvest.....	85
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Plans for current year:

1. Complete 1981 and 1982 Non-Resident Harvest Analysis

Budget:

YTG: \$3.0 thousand

Cooperators:

Publications, Reports:

Kale, W. Annual Reports.

Report Status for current year: Ongoing

Final Report due:

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Biometrics New Continuing Since Annual

Dates of Field Work N/A District _____ GMZ _____

PROJECT TITLE Annual Data Analysis and Miscellaneous Projects

Cooperating Agencies

- Purpose (problem)
1. Hunting License Analysis - to maintain accurate lists of resident and non-resident hunters on an annual basis. These lists are also integrated with computer harvest analyses. To also assist administration in revenue audits.
 2. Biological Submission Program - analysis by species on an annual basis to provide actual kill date and location for indicating harvest trends.
 3. Sport Fishing Survey - proposed organization for keypunching.
 4. Specific Analysis as requested.

Objectives

To up-date and conduct Annual analysis on various data and produce reports as provided by our existing computer system.

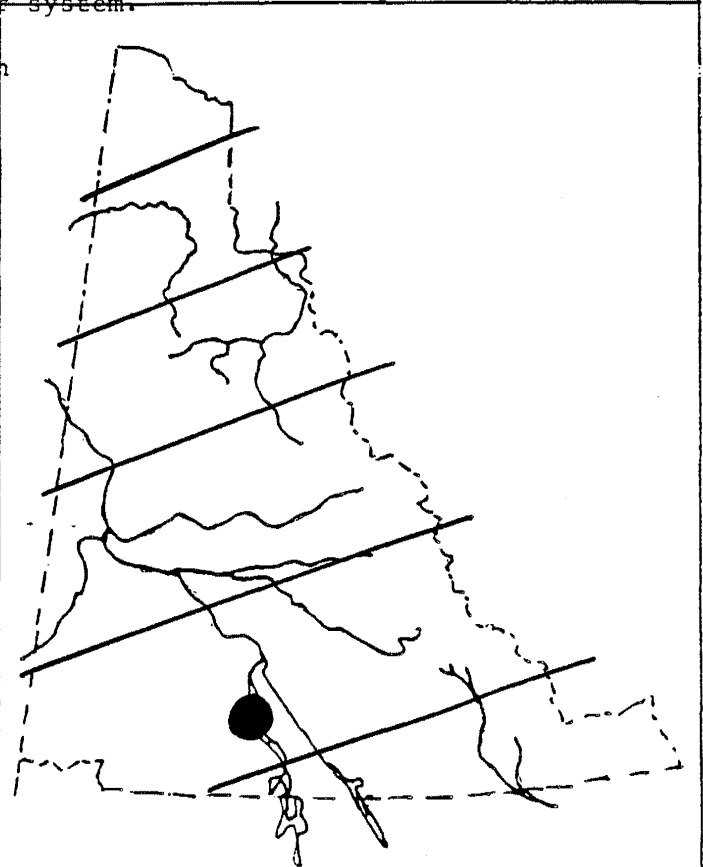
To propose new projects, Organization and analysis to be conducted as required.

To conduct specific analyses as requested.

Staff Involvement Months

Project Leader:

Karen Mueller Ongoing



Plans for current year:

1. Annual analysis of data from existing computer systems.
2. Specific analyses as requested.
3. Conduct proposed data organizations and analyses if required.

Budget:

YTG: N/A

Cooperators:

Publications, Reports:

Kale, Wayne. Annual Reports.

Report Status for current year: Ongoing

Final Report due:

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Biometrics

New

Continuing

Since annually

Dates of Field Work N/A

District _____

GMZ _____

PROJECT TITLE

Resident Hunter Questionnaire Analysis

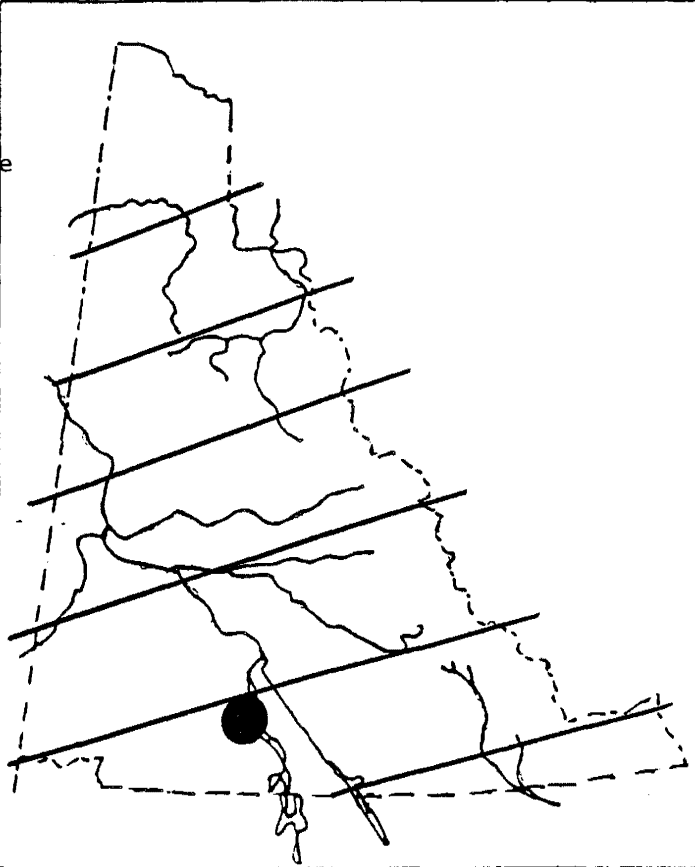
Cooperating Agencies

Purpose (problem)

A questionnaire is sent out annually to all Resident Hunters. The data from these questionnaires is analyzed each year and provides valuable resident harvest information of big game and small game species. A computer system has been developed to analyze this data and produce reports. To date, the data from 1978-1980 has been unsatisfactorily analyzed largely due to the computer systems available during these years. The data from 1981 and 1982 is at various stages of completion.

Objectives

1. To modify the existing computer programs to obtain a more comprehensive analysis of Hunter Questionnaire Data.
2. To complete organization and eventual analysis of 1981 and 1982 Hunter Questionnaire Data.
3. To reanalyze Hunter Questionnaire Data from 1978-1980 using modified computer programs.



Staff Involvement

Months

Project Leader:

Karen Mueller
Wayne Kale

ongoing

Plans for current year:

1. Complete 1981 and 1982 Hunter Questionnaire Analysis
2. Reanalyze 1978-1980 Hunter Questionnaire Data.

Budget:

YTG: N/A

Cooperators:

Publications, Reports:

Kale, Wayne Annual Reports.

Report Status for current year: Ongoing.

Final Report due:

LABORATORY

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YUKON DEPARTMENT OF RENEWABLE RESOURCES

Wildlife Project Laboratory New Continuing Since 1980

Dates of Field Work N/A District Whitehorse GMZ (all)

Project Title

Laboratory and Technical Services

Cooperating Agencies

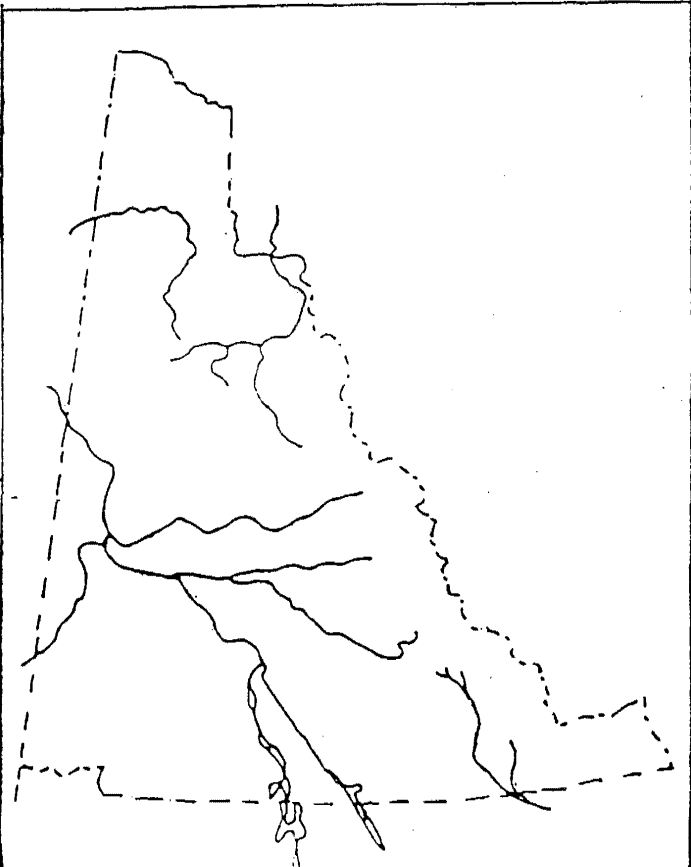
N/A

Purpose (problem)

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 of enforcement purposes.

Objectives

1. To coordinate the collection of biological information from laboratory analysis.
2. To maintain a clean, workable environment for laboratory analysis by staff and to maintain specialized equipment of the laboratory.
3. To provide an interface with public for the submission and exchange of data from hunter taken specimen.



Staff Involvement

Months

Project Leader:

P. Merchant

6

Plans for current year:

Biological submission forms will be completed for big game animals submitted by hunters throughout the open seasons. All permitting and recording of hunter-effort data will be supplied at laboratory. Major projects using facilities will include: Necropsy of wolf carcasses thaken during population control; wolverine carcass analysis from submissions of trappers; beaver carcass analysis; bear tooth sectioning; moose tooth sectioning; grouse specimen analysis.

Budget:

YTG: 3 thousand

Cooperators: N/A

Publications, Reports:

Various annual reports by management specialists.

Report Status for current year: N/A

Final Report due: