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# Index of Licenced Research Northwest Territories 1984

Science Advisor  
P.o. Box 1617  
Government of the Northwest Territories

January 1985

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## INTRODUCTION

This year for the first time the index includes not only licences issued under the Scientist's Ordinance, but also licences issued under the Wildlife Ordinance by the Department of Renewable Resources and licences issued by the Director of the Prince of Wales Northern Heritage Centre under the provisions of the N.W.T. Act dealing with archaeology.

During the 1984 calendar year 136 licences to carry out scientific research were issued to scientists. Eighty-one 1984 licences were issued to scientists directly affiliated with educational institutions. Of these 81 licences, 67 were issued to scientists from Canadian universities, 9 to scientists from U.S. universities, and 5 to scientists from other foreign universities. Of the 67 licences granted to scientists from Canadian universities:

Ontario received .....	25
Alberta received .....	22
Manitoba received .....	8
Quebec received .....	6
Saskatchewan received .....	2
New Brunswick received .....	2
British Columbia received ...	1
Newfoundland received .....	1

The index of licenced research gives the following information on each project: licence number, name and address of affiliation of licensee, objective of the research and its location.

It should be noted that investigators are obligated by the Ordinance to supply a report to the Commissioner within a stated time. These reports are available on application in Yellowknife.

Dan Billing,  
Science Advisor.

SCIENTIFIC RESEARCH LICENCES ..... 1

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SCIENTIFIC RESEARCH LICENCES



BIOLOGICAL RESEARCH

Licence Number

- 4123      Licensee:      Dr. Richard A. Ring  
Department of Biology  
University of Victoria  
P.O. Box 1700  
Victoria, B.C.  
V8W 2Y2
- Objective:      A continuation of a study on the  
freezing tolerance of Arctic insects.  
Samples will be collected for  
comparison to southern species.
- Location:      Tuktoyaktuk Peninsula and Inuvik area
- 
- 4121      Licensee:      Dr. Rolph A. Davis  
LGL Limited  
Environmental Research Associates  
Suite 414, 44 Eglinton Ave. West  
Toronto, Ontario  
M4R 1A1
- Objective:      A study to evaluate whether bowhead  
whales are affected by offshore oil  
exploration in the Canadian Beaufort  
Sea.
- Location:      The Canadian Beaufort Sea from  
Alaskan/Yukon border 141°W to Cape  
Bathurst, N.W.T. - 127°W and from  
the shore north to 72°N.
- 
- 4118      Licensee:      Ms. Lois Harwood  
ESL Environmental Sciences Ltd.  
2035 Mills Road  
R.R. #2  
Sidney, B.C.  
V8L 3S1
- Objective:      To monitor the relative abundance  
and distribution of bowhead whales  
relative to oil and gas industry  
activities.
- Location:      Beaufort Sea area - 141°W longitude  
in the west, to Cape Bathurst in  
the east.

Licence Number

4117

Licensee: David J. Rugh  
Wildlife Biologist  
National Marine Mammal Laboratory  
7600 Sand Point Way NE Bldg. 32  
Seattle, Washington  
U.S.A. 98115

Objective: To collect photographs of bowhead whales which, through stereophotogrammetric techniques, will provide length measurements of these animals allowing for a better assessment of stock stability.

Location: Tuktoyaktuk and DEW Line sites.

4115

Licensee: Dr. Tuomo Niemela  
Department of Botany  
University of Helsinki  
Unioninkatu 44  
00170 Helsinki 17, Finland

Objective: Mapping of the local mycoflora.  
Collecting fungi and seed material of (mainly) trees.  
A study of migratory birds.

Location: Inuvik and Yellowknife.

4113

Licensee: Pamela Norton  
PN Research Projects  
P.O. Box 2296  
Sidney, B.C.  
V8L 3S8

Objective: To examine white whale use of offshore areas during and after the period of "peak" numbers; to document whale distribution and abundance; to record movements and feeding; to determine percent calves in the population and to compare white whale distribution with major oceanographic features depicted in satellite imagery and with industrial activities.

Location: Southeastern Beaufort Sea - shore to pack ice edge approx. 72°N 127°W to 141°W longitude.

Licence Number

- 4108                      Licensee:      Professor A. Rogosin  
   Botany Department  
   Faculty of Science  
   Brandon University  
   Brandon, Manitoba  
   R7A 6A9
- Objective:      To collect plant specimens which will  
   be deposited in the herbarium of the  
   Botany Department of Brandon University.
- Location:        Clearwater Fjord and Arctic Bay, Baffin  
   Island and possibly Eskimo Point and  
   the Mackenzie Delta.
- 
- 4105                      Licensee:      Erwin Streisinger  
   232 Elmwood Avenue  
   Maplewood, N.J.  
   U.S.A. 07040
- Objective:      To gather data on the flora and fauna  
   along the northern edge of Boothia  
   Peninsula, along Bellot Strait for  
   future data correlation of species  
   gathered in other areas.
- Location:        Northern edge of Boothia Peninsula,  
   along Bellot Strait.
- 
- 4098                      Licensee:      Dr. D. Bruce Stewart  
   Arctic Resource Assessment Section  
   Freshwater Institute  
   501 University Crescent  
   Winnipeg, Manitoba  
   R3T 2N6
- Objective:      To conduct an aquatic resource survey  
   to gather, update and compile  
   information on fish resources and  
   human usage of those resources. Fish  
   will be collected and samples of water,  
   benthic and planktonic organisms and  
   shoreline vegetation will also be  
   collected for analysis.
- Location:        Baffin Island south of 68°N and west  
   of Cumberland Sound and Nottingham and  
   Prince Charles Islands.

Licence Number

4097	<u>Licensee:</u>	Professor John M. Green Department of Biology and MSRL Memorial University St. John's, Newfoundland A1B 3X9
	Objective:	To further investigate the abundance and distribution patterns of benthic fishes to provide a better basis for understanding variations in the foraging behaviour and reproductive success of the black guillemots.
	Location:	Nuvuk Island (62 23'N, 78 02'W)
4094	<u>Licensee:</u>	Dr. John B. Sprague Department of Zoology College of Biological Science University of Guelph Guelph, Ontario N1G 2W1
	Objective:	To collect samples of common amphipod crustaceans, microscopic crustaceans, and algae in order to measure their cadmium content.
	Location:	Resolute and Pond Inlet.
4092	<u>Licensee:</u>	Dr. T.C. Hutchinson Department of Botany University of Toronto Toronto, Ontario M5S 1A1
	Objective:	To continue studies of the Smoking Hills into the nature of the adaptations by which aquatic biota and tundra plants survive the intense acidic fumigations from the burning cliffs.
	Location:	Smoking Hills area of Cape Bathurst and Tuktoyaktuk.

Licence Number

- 4091      Licensee:      Mr. Graham Seagel  
Manager, Environmental Division  
Reid Crowther & Partners Ltd.  
200 - 260 West Esplanade  
North Vancouver, B.C.  
V7M 3G7
- Objective:      A study to characterize aquatic environments potentially affected by tailings decant effluent, assess their sensitivity to project influences and develop baseline data for future monitoring purposes. Water, sediment and benthic invertebrate samples will be collected for analysis. Fish will be captured for tagging and to obtain tissue samples for metal analysis.
- Location:      Lupin Mine vicinity on Contwoyto Lake.
- 
- 4089      Licensee:      Dr. Dietbert Thannheiser  
Institut fur Geographie  
Universitat Hamburg  
Bundesstr. 55  
D - 2000 HAMBURG 13  
Fed. Rep. of Germany
- Objective:      To study plant communities and their distribution patterns as a follow-up to previous studies.
- Location:      Hadley Bay, Cambridge Bay area.
- 
- 4086      Licensee:      Dr. Richard D. Revel  
Faculty of Environmental Design  
University of Calgary  
2500 University Drive N.W.  
Calgary, Alberta  
T2N 1N4
- Objective:      A study to document varieties of seeds used in vegetable gardening and methods used in order to promote northern gardening.
- Location:      Yellowknife and Inuvik.

Licence Number

4085

Licensee: Dr. M.C. Lewis  
Department of Biology  
York University  
Faculty of Science  
4700 Keele Street  
Downsview, Ontario  
M3J 1P3

Objective: To complete studies begun in 1976 of plant species and vegetational communities and to undertake field studies to investigate sex ratios of arctic willows in relation to habitat, as there appears to be a predominance of female plants in many habitats.

Location: Igloodik and Sarcpa Lake.

4081

Licensee: Kevin P. Timoney  
c/o Boreal Institute for Northern Studies  
The University of Alberta  
CW 401 Biological Sciences Bldg.  
Edmonton, Alberta  
T6G 2E9

Objective: Field sampling coupled with air photo interpretation are used to describe vegetation zonation. Objectives include: (a) a delimitation of the subarctic forest-tundra ecotone; (b) geographic variation in the vegetation, sorts, species ranges, and width and position of the forest-tundra.

Location: Salmita Mine, Courageous Lake, Coppermine River, Kendall River, Dismal Lakes, Horton Lake, Horton River, Tuktoyaktuk.

4079

Licensee: Peter G. Ion  
c/o Boreal Institute for Northern Studies  
The University of Alberta  
CW 401 Biological Sciences Building  
Edmonton, Alberta  
T6G 2E9

Objective: The study will involve the continuous monitoring of one high elevation permanent snowpatch and adjacent snow-free areas to assess their role in habitat selection in woodland caribou. Animal observation will supplement this data in order to accept or reject existing hypotheses on the role of rival environments to ungulates.

Location: MacMillan Pass.

## 4069

Licensee:

Objective:

Location:

Licensee:

Objective:

Location:

Licensee:

Objective:

Location:

.../8

Licence Number

4067

Licensee: Dr. J. Svoboda  
Associate Professor of Botany  
Erindale Campus  
University of Toronto  
Mississauga, Ontario  
L5L 1C6

Objective: To study productivity of high arctic meadows; to experiment with the efficiency of dome-shaped greenhouses for growing vegetables; to study plant communities and prepare a vegetation map of the Sverdrup Pass.

Location: Bache Peninsula area at Ellesmere Island, Alexandra Fiord, Sverdrup Pass.

4062

Licensee: Dr. W. John Richardson  
LGL Ltd.  
Environmental Research Associates  
44 Eglinton Avenue West  
Toronto, Ontario  
M4R 1A1

Objective: To continue to conduct studies to determine the possible effects of oil and gas exploration and development on the behaviour of the Bowhead whale.

Location: Beaufort Sea.

4058

Licensee: Jim Troubridge  
R.R. # 1  
Cayuga, Ontario  
NOA 1E0

Objective: To collect arctic insects in general and Lepidoptera in particular.

Location: Coppermine, Holman Island.



Licence Number

4057                    Licensee:        Mr. C. McLeod  
   R.L. & L. Environmental Services Ltd.  
   17312 - 106 Avenue  
   Edmonton, Alberta  
   T5S 1H9

                         Objective:        To identify and map major fall spawning  
   areas between Mountain Rapids, Alberta  
   and the Slave River Delta. To monitor  
   fish movements and tracking during the  
   late summer and fall seasons. To quantify  
   late summer and fall fishery resource use.  
   This is a continuation of 1983 work.

                         Location:        Slave River to the mouth of the Slave  
   River at Great Slave Lake.

  

4053                    Licensee:        James F. Basinger  
   Department of Geological Sciences  
   University of Saskatchewan  
   Saskatoon, Saskatchewan  
   S7N 0W0

                         Objective:        To study the evolution of temperate  
   floras in western and northern Canada  
   and with the relationship between the  
   early Tertiary age floras and those  
   that occupy temperate regions in North  
   America at present.

                         Location:        Fort Norman area.

  

4046                    Licensee:        Dr. Lionel Johnson  
   Freshwater Institute  
   501 University Crescent  
   Winnipeg, Manitoba  
   R3T 2N6

                         Objective:        Arctic char biology; experimental  
   cropping of whitefish and lake trout.

                         Location:        Nauyuk Lake, Chitty Lake  
   Biological Reserve.

Licence Number

4045	<u>Licensee:</u>	Michael Kingsley Freshwater Institute 501 University Crescent Winnipeg, Manitoba R3T 2N6
	Objective:	Aerial survey and seal biology.
	Location:	Tremblay Sound (North Baffin Island) Beaufort Sea.
4044	<u>Licensee:</u>	Dr. Rob Stewart Freshwater Institute 501 University Crescent Winnipeg, Manitoba R3T 2N6
	Objective:	To carry out beluga sampling, reproductive biology.
	Location:	Pangnirtung (S.E. Baffin Island) Keewatin Coast (Hudson Bay) High Arctic Islands (Ellesmere, Cornwallis & Somerset).
4038	<u>Licensee:</u>	B.W. Fallis Resource Impact Biologist Arctic Resource Assessment Section Freshwater Institute 501 University Crescent Winnipeg, Manitoba R3T 2N6
	Objective:	To assess the uptake of metals by sediments and biota in the vicinity of Nanisivik Mine and the Polaris Mine. The data will be used to monitor the extent to which metal concentrations in sediments and biota have changed since similar studies were conducted in 1980 and 1981.
	Location:	Strathcona Sound, Little Cornwallis Island.

Licence Number

- 4037      Licensee:      Jeanette L. Moorhouse  
Department of Geography  
University of Colorado  
Boulder, Colorado  
80309
- Objective:      To identify vascular plant species and  
collecting voucher specimens, and  
collecting phytosociological data for  
representative plant communities.
- Location:      A 20-mile transect north and south  
of Cape Dorset.
- 
- 4034      Licensee:      Peter Strahlendorf  
Consulting and Research  
P.O. Box 625  
Station Q  
Toronto, Ontario  
M4T 2N4
- Objective:      To carry out an arctic ecology program  
within the framework of the Northern  
Cultural Heritage Project (an integration  
of scientific research in the Northwest  
Territories with an education and  
employment project for young northerners.)
- Location:      Truelove Lowland on Devon Island, N.W.T.
- 
- 4027      Licensee:      Dr. Ross W. Wein, Director,  
Fire Science Centre, and  
Professor of Biology  
University of New Brunswick  
P.O. Box 4400, Fredericton  
New Brunswick  
E3B 5A3
- Objective:      To gather information on fire behavior,  
the effects of fire on plants and animals,  
and the social implications of fire  
management. Satellite imagery processing,  
aerial photography and ground censusing  
will be used.
- Location:      Hook Lake area.

Licence Number

4025

Licensee: Mr. Bernard Bourgoin  
Department of Geology  
McMaster University  
1280 Main Street West  
Hamilton, Ontario  
L8S 4M1

Objective: To study marine benthic fauna,  
mainly bi-valved molluscs.

Location: Tuk Peninsula and Tuk Harbour.

4021

Licensee: Mr. Brian Hayes  
Project Co-ordinator  
LBG Expedition  
Zoology Department  
University College Dublin  
Belfield, Stillorgan Road  
Dublin 4, Ireland

Objective: To investigate the breeding biology  
of high-arctic, light-bellied brent  
geese, including allied environmental  
factors which influence their breeding  
success.

Location: Bathurst Island.

4017

Licensee: Dr. Harold E. Welch  
Freshwater Institute  
501 University Crescent  
Winnipeg, Manitoba  
R3T 2N6

Objective: To carry out a study on quantification  
of the marine food chain leading to  
marine mammal production.

Location: Resolute Bay.

Licence Number

- 4016      Licensee:      Bruce E. Lyon  
Department of Biology  
Queen's University  
Kingston, Ontario  
K7L 3N6
- Objective:      To carry out studies of (1) parental care in tundra birds; (2) ecological correlates of nest dispersion in high arctic birds. The study species will be Red Phalarope and Sabine's Gull. Individual birds will be color-marked to facilitate recognition.
- Location:      Jenny Lind Island, NWT, near DEW Line station.
- 
- 4001      Licensee:      James R. Abel, M.D.  
Director,  
Arctic Barrens Expedition  
Pine Tree Circle  
Pelham, Massachusetts
- Objective:      To observe and experience the ecology and environs of the Arctic and sub-Arctic wilderness regions of the Canadian tundra.
- Location:      Lac de Gras Lake, Coppermine River, Point Lake, Takuyuak Lake, Hood River, the Arctic Sound, Yellowknife.

EARTH AND PHYSICAL SCIENCES (GEOLOGICAL)

- 4002      Licensee:      Dr. A.L. Washburn  
Quaternary Research Centre  
University of Washington  
Seattle, Washington  
U.S.A. 98195
- Objective:      To continue the research project in periglacial geomorphology and glacial geology.
- Location:      Cornwallis Island.

Licence Number

4005

Licensee: Philippe de Heering  
Staff Scientist  
Advanced Systems Division  
Canadian Astronautics Limited  
1024 Morrison Drive  
Ottawa, Ontario  
K2H 8K7

Objective: To carry out phase I of a bathymetric survey system. A tower will be built on the ice and a rifle (460 cal. Weatherby) mounted on it. The rifle will be discharged into the ice and measurements made to determine the amount of sound transmitted to the water, the level of bottom echo detected in air etc.

Location: Allen Bay near Resolute.

4014

Licensee: Charles A. Laymon  
Institute of Arctic and Alpine Research  
University of Colorado  
Boulder, Colorado  
U.S.A. 80309

Objective: Mapping moraines and other glacial features, collecting samples of till and noting minerology of erratics encountered on the surface, measuring the orientation of striae and other ice directional features, measuring the elevation of raised marine deposits and sampling these deposits for shells which will be radiocarbon dated and used for amino acid geochronology.

Location: The southern coast of the Foxe Peninsula west of Cape Dorset and Nottingham Island.

Licence Number

4015	<p><u>Licensee:</u> Professor W.H. Lehn Department of Electrical Engineering The University of Manitoba Winnipeg, Manitoba R3T 2N2</p> <p><u>Objective:</u> To investigate optical refraction in the lower layers of the atmosphere (anomalous refraction, such as the superior mirage and optical ducting). Photographic recording of land forms and their refracted images; measurement of refraction and horizon shift; some measurement of atmospheric temperatures in the lowest layers (10-15 meters); local surveys of the photographed land forms.</p> <p><u>Location:</u> Tuktoyaktuk and environs and/or Resolute Bay.</p>
4018	<p><u>Licensee:</u> Dr. R. Frederking Division of Building Research National Research Council of Canada Ottawa, Ontario K1A 0R6</p> <p><u>Objective:</u> Measure general environmental factors, obtain temperature and salinity profile of the ice cover. Ice features will be described and documented. Measure ice movements by using arrays of reflectors and an electronic distance measuring device. Measure ice pressures.</p> <p><u>Location:</u> Adams Island.</p>

Licence Number

4019

Licensee: Dr. O.A. Dixon  
Professor, Dept. of Geology  
Faculty of Science and Engineering  
University of Ottawa  
Ottawa, Ontario  
K1N 6N5

Objective: To carry out a combined sedimentological-paleoecological study of surface exposures of the Devonian Ramparts reef complex. This would involve mapping, measurement and description of stratigraphic sections and collection of fossil samples for later laboratory study. This is the conclusion of work begun in 1982.

Location: Two camp sites between Powell Creek and Bell Creek, in Mackenzie Mountains, west of Norman Wells.

4020

Licensee: Dr. O.A. Dixon  
Professor, Dept. of Geology  
Faculty of Science and Engineering  
University of Ottawa  
Ottawa, Ontario  
K1N 6N5

Objective: To carry out a study of Lower Paleozoic stratigraphy and geological history of the Somerset-Cornwallis-Devon Islands region. This would include geological mapping, measurement of stratigraphic sections, and collection of rock and fossil samples for subsequent laboratory study.

Location: Several sites in the vicinity of Gascoyne Inlet, Devon Island.



Licence Number

- 4023      Licensee:      Dr. A.G. Lewkowicz  
Assistant Professor  
Department of Geography  
Erindale Campus  
University of Toronto  
Mississauga, Ontario  
L5L 1C6
- Objective:      To measure the energy exchange, rate of  
headwall retreat and water balance of a  
number of ground ice slumps. This is a  
continuation of a study begun in 1983.
- Location:      Sand Hills, south-east of Sachs Harbour,  
Banks Island.
- 4024      Licensee:      Alec Aitken  
Department of Geology  
McMaster University  
Hamilton, Ontario  
L8S 4M1
- Objective:      To investigate the nature of arctic  
bivalve growth; to identify possible  
latitudinal trends in arctic bivalve  
morphology, and to assess the role of  
sea ice as a factor influencing arctic  
bivalve morphology and growth.
- Location:      Frobisher Bay and Pangnirtung.
- 4029      Licensee:      Peter Adams  
Professor of Geography  
Trent University  
Peterborough, Ontario  
K91 7B8
- Objective:      To carry out a study of the mass  
balance of the White Glacier.
- Location:      Expedition Fiord, Axel Heiberg Island.

Licence Number

4028	<u>Licensee:</u>	Mr. Martin Jeffries Department of Geography University of Calgary 2500 University Drive N.W. Calgary, Alberta T2N 1N4
	Objective:	To carry out a study of the structure, behaviour and origin of the Ward Hunt Ice Shelf. To carry out a snowmobile ground truth survey of the landfast sea ice between the mouth of Nansen Sound and Clements Markham Inlet. Ice cores will be taken, aerial photography and radar flights will be used.
	Location:	Ward Ice Shelf, Ellesmere Island Nansen Sound, Clements Markham Inlet.
4030	<u>Licensee:</u>	H. Blatter Swiss Federal Institute of Technology Zurich, Switzerland
	Objective:	To conduct echo-sounding on the tongues of the White and Thompson Glaciers.
	Location:	Expedition Fiord, Axel Heiberg Island.
4032	<u>Licensee:</u>	Jorg Mattner Leibnizstrabe 18/62 3392 Clausthal West Germany
	Objective:	To map, profile and analyze the soil and loose rock in McDougall Pass area, Richardson Mountains.
	Location:	McDougall Pass, Richardson Mountains.

Licence Number

4031	<p><u>Licensee:</u> Cheryl McKenna Neuman c/o Department of Geography Queen's University Kingston, Ontario K7L 3N6</p> <p>Objective: To survey, map and photograph aeolian (wind blown) sediments and landforms within an area extending from the head of the fiord to Tumbling Glacier Lake with possible excursions as far as Windy Lake. To install instrumentation that will monitor wind activity, surface and climatic conditions, and sediment movement by wind.</p> <p>Location: Auyuittuq National Park at the head of Pangnirtung Fiord.</p>
4035	<p><u>Licensee:</u> Dr. Lawrence C. Bliss Professor of Botany University of Washington Seattle, Washington U.S.A. 98195</p> <p>Objective: To continue ecological research related to botanical resources.</p> <p>Location: Devon Island.</p>
4039	<p><u>Licensee:</u> Dr. Robert Gilbert Department of Geography Queen's University Kingston, Ontario K7L 3N6</p> <p>Objective: To carry out studies of the origin and sedimentology of intertidal flats at Pangnirtung.</p> <p>Location: Pangnirtung, Baffin Island.</p>

Licence Number

4040	<u>Licensee:</u>	Professor A.C. Lenz Department of Geology Faculty of Science Biological & Geological Building The University of Western Ontario London, Ontario N6A 5B7
	Objective:	To collect fossils for scientific study.
	Location:	Backbone Ranges of the Mackenzie Mountains in the headwaters areas of the South Nahanni River, Western Melville Island, southern and central Ellesmere Island, Arctic Archipelago.
4041	<u>Licensee:</u>	Dr. J.C. Ritchie Department of Botany Scarborough College University of Toronto West Hill, Ontario M1C 1A4
	Objective:	To survey the area between 120° and 128°W and 68° and 70°N for small lakes suitable for subsequent coring of unconsolidated sediment. To take small samples of surface mud from a selection of roughly 40 lakes during the course of this survey.
	Location:	North of Great Bear Lake.
4043	<u>Licensee:</u>	Dr. Hugo Veldhuis Canada-Manitoba Soil Survey Room 362, Ellis Bldg. University of Manitoba Winnipeg, Manitoba R3T 2N2
	Objective:	To investigate, describe, map and sample soils in order to produce a map (scale 1:1 000 000) and report on the soils.
	Location:	Nowleye-Angikuni Lakes area Kaminuriak Lake area Rankin Inlet.

Licence Number

4047	<u>Licensee:</u>	Ian MacNeil Senior Planner Terrestrial Studies National Parks Branch Environment Canada OTTAWA, Ontario
	Objective:	National park survey.
	Location:	Thomsen River area, Northern Banks Island.
4048	<u>Licensee:</u>	Murray McComb National Parks Branch Environment Canada Ottawa, Ontario K1A 1G2
	Objective:	National park survey.
	Location:	Wager Bay National Park.
4049	<u>Licensee:</u>	Doug Yurick National Parks Branch Environment Canada Ottawa, Ontario K1A 1G2
	Objective:	National marine park survey.
	Location:	Eclipse Sound, Eastern Lancaster Sound National Marine Park.
4050	<u>Licensee:</u>	Ian MacNeil Senior Planner, Terrestrial Studies National Parks Branch Environment Canada OTTAWA, Ontario K1A 1G2
	Objective:	Canadian landmark survey.
	Location:	Nelson Head area, Southern Banks Island.

Licence Number

4051

Licensee: Ian MacNeil  
Senior Planner, Terrestrial Studies  
National Parks Branch  
Environment Canada  
OTTAWA, Ontario  
K1A 1G2

Objective: National Park survey.

Location: Southampton Island Region.

4052

Licensee: Gerald J. Romick  
Senior Research Consultant  
Geophysical Institute  
University of Alaska  
C.T. Elvey Building  
Fairbanks, Alaska  
U.S.A. 99701

Objective: Operation of the Alaska-Canada High  
Latitude Magnetic Chain of Stations.

Location: Mould Bay, Sachs Harbour, Cape Parry,  
Eureka, Inuvik.

4054

Licensee: Dr. Brian Jones  
Paleontological Collections  
Building F33  
Edmonton Research Station  
University of Alberta  
Edmonton, Alberta

Objective: To complete the project dealing with the  
stratigraphy and sedimentology of the  
Silurian rocks exposed on Brodeur Peninsula,  
NW Baffin Island. Study will involve  
mapping of strata, measurement of selected  
stratigraphic sections and collecting of  
samples where appropriate.

Location: Resolute Bay, Brodeur Peninsula,  
NW Baffin Island.

Licence Number

- 4055                      Licensee:      Dr. Jean Pilon  
Energy, Mines and Resources Canada  
Earth Physics Branch  
Division of Gravity, Geothermics and  
Geodynamics  
1 Observatory Crescent  
Ottawa, Ontario  
K1A 0Y3
- Objective:              To carry on with the establishment of a  
series of permafrost observatories in the  
NWT to provide a cross section of perma-  
frost conditions, through which to conduct  
long term research on permafrost  
characteristics, permafrost stability,  
permafrost climate interaction and its  
response to man induced and natural  
disturbances, at which to evaluate new  
tools to determine the properties of  
permafrost.
- Location:               Norman Wells to Zama pipeline.
- 4056                      Licensee:      John C. Anderson  
Surface Water Division  
National Hydrology Research Institute  
Ottawa, Ontario  
K1A 0E7
- Objective:               To conduct hydrologic studies in the  
Mackenzie Valley.
- Location:               Mackenzie Valley.
- 4059                      Licensee:      Cynthia Lamson  
Research Associate  
Dalhousie Ocean Studies Programme  
1321 Edward Street  
Halifax, Nova Scotia  
B3H 3H5
- Objective:               To undertake a regional ocean management  
study of the Baffin Bay/Davis Strait region,  
concentrating on Canadian/Greenland  
relations and joint resource management options.
- Location:               Baffin Bay/Davis Strait Region.

Licence Number

4061

Licensee: Michael J. Melchin  
Department of Geology  
University of Western Ontario  
London, Ontario  
N6A 5B7

Objective: To collect Paleozoic fossils for  
laboratory study.

Location: Central Melville Island  
Northern Cornwallis Island  
West-central Ellesmere Island.

4065

Licensee: Barbara J. Winter  
Curator of Collections  
Prince of Wales Northern Heritage Centre  
Yellowknife, N.W.T.

Objective: To assess fossil deposits on the Hay  
and Trout Rivers. Collection of  
specimens.

Location: Hay River and Trout River.

4066

Licensee: Dr. J.D. Jacobs  
Associate Professor  
Department of Geography  
University of Windsor  
401 Sunset Avenue  
Windsor, Ontario  
N9B 3P4

Objective: To carry out micrometeorological  
measurements, mapping and collection of  
lake sediments, soils, and plants for  
analysis. The object is to describe the  
sequence of post-glacial climate, vegetation  
and environmental change.

Location: Frobisher Bay and Burton Bay.



Licence Number

4068

Licensee: Owen Beattie  
Assistant Professor  
Department of Anthropology  
The University of Alberta  
Edmonton, Alberta  
T6G 2H4

Objective: To investigate certain characteristics  
of the Franklin Expedition relics.

Location: Beechy Island.

4071

Licensee: Anthony Lambert  
Earth Physics Branch  
3 Observatory Crescent  
Ottawa, Ontario  
K1A 0Y3

Objective: To measure crustal deformation in North  
America leading to a better understanding  
of earthquakes and plate tectonics.  
Measurements will be made by the technique  
of long-baseline interferometry using a  
mobile radio telescope.

Location: Yellowknife.

4072

Licensee: Dr. Brian Jones  
Paleontological Collections  
Department of Geology  
University of Alberta  
Edmonton, Alberta  
T6G 2E3

Objective: To study the stratigraphy, sedimentology,  
paleoecology, and paleontology of the  
Upper Devonian Kakisa and Trout River  
Formations.

Location: Trout River.

Licence Number

4073

Licensee: Mr. T. Skwara  
Dept. of Geological Sciences  
University of Saskatchewan  
Saskatoon, Sask.  
S7N 0W0

Objective: To determine the presence and extent of vertebrate fossils in Tertiary terrestrial sediments in fossil-bearing strata in order to understand the origin, evolution, biogeography and paleoecology of fossil mammals.

Location: Richardson Mountains and Caribou Hills.

4074

Licensee: Brian R. Braidwood  
Boreal Institute for Northern Studies  
The University of Alberta  
CW 401 Biological Sciences Bldg.  
Edmonton, Alberta  
T6G 2E9

Objective: To develop a classification and evaluation system for unique areas through personal interviews, local resource managers, regarding special features within their jurisdiction.

Location: Fort Smith.

4075

Licensee: Malcolm P. Brown  
Boreal Institute for Northern Studies  
The University of Alberta  
CW 401 Biological Sciences Bldg.  
Edmonton, Alberta  
T6G 2E9

Objective: A study of lake quaternary glacio-lacustrine sediments and abandoned lake shorelines on northeast Ellesmere Island, including surveying and mapping the uppermost lake shorelines to establish the nature of isostatic uplift in the area. Studying the exposed lake sediments and collecting organic material for dating purposes.

Location: Southern end of Piper Pass, N.E. Ellesmere Island and the Hazen Plateau.

Licence Number

4078      Licensee:      David Green  
Boreal Institute for Northern Studies  
The University of Alberta  
CW 401 Biological Sciences Bldg.  
Edmonton, Alberta  
T6G 2E9

Objective:      A study of the Quaternary sediments across  
Russell Island with special emphasis on  
the raised marine deposits, to establish  
sea level fluctuations which are related  
to isostatic coastal movements during  
glaciations. Shell and wood fragments  
from beach deposits will be collected.

Location:      Russell Island.

  

4083      Licensee:      Garry G. McLean  
Coordinator, NLUIS Mapping Program  
Lands Directorate, Environment Canada  
20th Floor, Place Vincent Massey  
351 St. Joseph Blvd.  
Hull, P.Q.      K1A 0E7

Objective:      A study to gather data for maps to provide  
an information base to facilitate  
comprehensive regional planning and  
application of the Territorial Land Use  
Regulations. Field program involves  
collection and verification of data on  
wildlife resources, fish resources, native  
land use, ecological land classification,  
coastal evaluation and a variety of socio-  
economic and cultural aspects.

Location:      Frobisher Bay, Pangnirtung, Cape Dorset,  
Lake Harbour and the DEWLine stations at  
Longstaff Bluff and Dewar Lakes.

Licence Number

4088

Licensee: Dr. W.M. Schwerdtner  
Department of Geology  
University of Toronto  
170 College Street  
Toronto, Ontario  
M5S 1A1

Objective: To conclude the studies of the structural evolution of the eastern Sverdrup Basin over the past 200 million years. In particular, the origin of the evaporite related features on the east and west-central shores of Axel Heiberg Island, Canadian Arctic Archipelago.

Location: Axel Heiberg Island.

4090

Licensee: Dr. David G. Harry  
Terrain Sciences Division  
Geological Survey of Canada  
601 Booth Street  
Ottawa, Ontario  
K1A 0E8

Objective: A project directed toward the prediction and monitoring of geomorphic and geologic conditions along the route of the Norman Wells-Zama pipeline. Fieldwork will focus on observations of terrain performance along the pipeline ROW following the 1983/84 winter construction season.

Location: Norman Wells and Fort Simpson.

4102

Licensee: Dr. Gordon C. Jacoby Jr.  
Research Associate  
Lamont-Doherty Geological Observatory  
of Columbia University  
Palisades, New York  
U.S.A. 10964

Objective: To collect core samples from trees for later annual ring studies that will provide information on the climate during the history of the tree.

Location: Horton and Thelon River area.

Licence Number

4095

Licensee: G. Peter Kershaw  
Department of Geography  
University of Alberta  
Edmonton, Alberta  
T6G 2H4

Objective: Dempster Highway disturbance studies to determine the state of natural recovery on human disturbances of various ages (this includes the botanical and wildlife habitat characteristics). Also, to continue monitoring of the species and population characteristics of small mammals in 12 tundra habitats and continue monitoring of small mammal habitat selection for the 4th year of the study.

Location: Dempster Highway corridor and MacMillan Pass - Tsichu River area.

4096

Licensee: Mr. Jay A. Stravers  
Institute of Arctic & Alpine Research  
Campus Box 450  
University of Colorado  
Boulder, Colorado 80309  
U.S.A.

Objective: To examine coastal and inland glacial tills and moraines. Data concerning the degree of soil development and boulder weathering characteristics will be collected to determine the age of glacial deposits. Small till samples will be collected for analysis and marine mollusc shells will be collected from the raised marine deposits for purposes of radiocarbon dating.

Location: North shore of Frobisher Bay between Frobisher's Farthest and Loks Land and possibly Akpatok Island in Ungava Bay.

Licence Number

4104	<u>Licensee:</u>	Dr. G.M. Young Department of Geology University of Western Ontario London, Ontario N6A 5B7
	Objective:	To study the glacial sediments of Precambrian rocks.
	Location:	Guy's Bight, northern Baffin Island.
4106	<u>Licensee:</u>	Dr. Robert M. West Carnegie Museum of Natural History Carnegie Institute 4400 Forbes Avenue Pittsburgh, Penn. 15213 U.S.A.
	Objective:	A continuation of the project to conduct paleontological and geological field work by fossil collecting and geologic mapping.
	Location:	Ellesmere and Devon Islands.
4107	<u>Licensee:</u>	Dr. Hugh M. French Departments of Geography and Geology University of Ottawa 165 Waller Ottawa, Ontario K1N 6N5
	Objective:	A continuation of studies relating to geology, permafrost and Quaternary research.
	Location:	Banks Island and the Arctic Islands. SE Melville Island in the vicinity of Rea Point and on parts of the Sabine Peninsula.

Licence Number

- 4109                      Licensee:        Dr. W.J. Zinsmeister  
   Research Scientist  
   Department of Geosciences  
   Purdue University  
   West Lafayette, Indiana  
   U.S.A.     47907
- Objective:        To conduct a geologic and paleontologic  
   investigation of the Tertiary sequence  
   in the Strathcona and Bay Fiord region.
- Location:         Ellesmere Island.
- 
- 4110                      Licensee:        John R. Radforth, P.Eng.  
   President  
   Peat Consultants, Canada, Ltd.  
   P.O. Box 248  
   Bracebridge, Ontario  
   POB 1C0
- Objective:        A study of the feasibility of fuel  
   peat production at Hay River.
- Location:         Hay River and environs.
- 
- 4111                      Licensee:        Dr. Norman E. Kagan  
   The Rockefeller University  
   68-28 Juno Street  
   Forest Hills, N.Y.  
   U.S.A.     11375
- Objective:        To collect data on river waters and  
   recording pH., conductivity, and  
   collecting samples of water.
- Location:         Western portion of the N.W.T., South  
   Nahanni River and the Liard River.

Licence Number

4112

Licensee: Dr. Ekkehard Schunke  
Geographisches Institut  
Universitat Gottingen  
Goldschmidstrabe 5  
D-3400 Gottingen  
Fed. Rep. of Germany

Objective: Collecting observations and measurements  
of surface forms and surface processes,  
soils, permafrost, and hydrology.

Location: Richardson Mountains.

4120

Licensee: Mr. Jeff Churchill  
Department of Geography  
Trent University  
Peterborough, Ontario  
K9J 7B8

Objective: Investigate the condition of Park trails.

Location: Auyuittuq National Park.

4124

Licensee: Matt Fairbarns  
c/o Canadian Forestry Service  
5320 - 122 Street  
Edmonton, Alberta  
T6H 3S5

Objective: To choose study sites for work to be  
done next spring on investigation of  
vegetation-permafrost-microclimate  
relationships associated with subarctic  
pipeline disturbances.

Location: Dempster Highway between Fort McPherson  
and Arctic Red River and areas between  
Norman Wells and the mouth of the Saline  
River.



Licence Number

- 4125      Licensee:      Mlle. France Morin  
Department of Chemistry-Biology  
University of Quebec  
Three Rivers, Quebec  
G9A 5H7
- Objective:      To measure, with the aid of data gathered  
about temperature at the two weather  
stations (experimental and official).  
First, whether differences exist between  
the minimum and maximum daily temperatures  
of the two stations, and secondly, at what  
moment the differences occur (as a function  
of the wind).
- Location:      Igloolik and Hall Beach area.
- 
- 4127      Licensee:      Richard Langley  
Dept. of Surveying Engineering  
University of New Brunswick  
Fredericton, New Brunswick  
E3B 5A3
- Objective:      To determine Very Long Base Line (VLBL)  
interferometry between a number of radio  
telescopes and to study how, why and where  
earthquakes occur.
- Location:      Yellowknife area.
- 
- 4131      Licensee:      David A. Sherstone  
Inuvik Scientific Resource Centre  
Indian and Northern Affairs Canada  
P.O. Box 1430  
Inuvik, N.W.T.  
XOE 0T0
- Objective:      Study winter ice thickness in the  
Mackenzie Delta.
- Location:      Inuvik, Aklavik.

ENGINEERING

Licence Number

4000

Licensee: Acres Consulting Services Limited  
5th Floor  
10201 Southport Road S.W.  
Calgary, Alberta  
T2W 4X9

Objective: To install automatic water level gauges at Bell Rock, Brule Point, and one at the bifurcation with the Jean River. Spot water levels will be measured at other points of interest along the river. Measurements of ice thicknesses, water temperatures and flow velocities under the ice will be made.

Location: Slave River.

4012

Licensee: Acres Consulting Services Limited  
5th Floor  
10201 Southport Road S.W.  
Calgary, Alberta  
T2W 4X9

Objective: To carry out bathymetric surveys of the Slave River channel, topographic surveys of the river banks, and to establish permanent benchmarks along the river at approximately two kilometre intervals.

Location: Slave River.

Licence Number

- 4080      Licensee:      Brian Langnau  
Boreal Institute for Northern Studies  
The University of Alberta  
CW 401 Biological Sciences Bldg.  
Edmonton, Alberta  
T6G 2E9
- Objective:      To make qualitative and quantitative observations of the performance of the Dempster Highway and to suggest design improvements. Observations include cut/fill slope sloughing, permafrost, degradation from highway fills, cuts, bridges and culverts, borrow pit degradation, road trafficability, road heave and drainage disruption.
- Location:      Dempster Highway and Inuvik.
- 
- 4130      Licensee:      Dr. Pierre-Claude Aitcin  
Departement de genie civil  
Faculte des sciences appliquees  
Universite de Sherbrooke  
Sherbrooke, Quebec  
J1K 2R1
- Objective:      Testing binding material to reduce amount of cement required in the north.
- Location:      Nanisivik and Arctic Bay.

HEALTH SERVICES

- 4003      Licensee:      Dr. R.P. Bryce Larke  
Clinical Virologist  
Provincial Laboratory of Public Health  
University of Alberta  
Edmonton, Alberta  
T6G 2J2
- Objective:      To carry out a study of the epidemiology and control of viral hepatitis in Northern Canada.
- Location:      Various N.W.T. communities.

Licence Number

4006	<u>Licensee:</u>	Dr. Brian D. Postl Northern Medical Unit University of Manitoba Faculty of Medicine 61 Emily Street Winnipeg, Manitoba R3E 1Y9
	Objective:	To study epidemiology and therapy of Group A Streptococcal disease in northern native communities.
	Location:	St. Therese Point, Manitoba and Rankin Inlet, N.W.T.
4007	<u>Licensee:</u>	Dr. Brian D. Postl Northern Medical Unit University of Manitoba Faculty of Medicine 61 Emily Street Winnipeg, Manitoba R3E 1Y9
	Objective:	To carry out a study of rheumatic diseases among the Inuit in the Keewatin.
	Location:	Rankin Inlet, Eskimo Point, Whale Cove, Repulse Bay, Chesterfield Inlet, Baker Lake, Coral Harbour.
4008	<u>Licensee:</u>	Dr. Ian Chalmers c/o Northern Medical Unit University of Manitoba Faculty of Medicine 61 Emily Street Winnipeg, Manitoba R3E 1Y9
	Objective:	To carry out a study of rheumatic diseases among the Inuit in the Keewatin.
	Location:	Rankin Inlet, Eskimo Point, Whale Cove, Repulse Bay, Chesterfield Inlet, Baker Lake, Coral Harbour.

Licence Number

4009	<u>Licensee:</u>	Dr. Kiem Oen c/o Northern Medical Unit University of Manitoba Faculty of Medicine 61 Emily Street Winnipeg, Manitoba R3E 1Y9
	Objective:	To carry out a study of rheumatic diseases among the Inuit in the Keewatin.
	Location:	Rankin Inlet, Eskimo Point, Whale Cove, Repulse Bay, Chesterfield Inlet, Baker Lake, Coral Harbour.
4010	<u>Licensee:</u>	G.W. Heinke Dept. of Civil Engineering University of Toronto Toronto, Ontario M5S 1A4
	Objective:	To establish the improvements in the treatment efficiency and effluent quality on the reconstructed lagoon in Inuvik.
	Location:	Inuvik, INA Research Laboratory.
4011	<u>Licensee:</u>	A.P. Hornby Environmental Carcinogenesis Unit B.C. Cancer Research Centre 601 West 10th Avenue Vancouver, B.C. V5Z 1L3
	Objective:	To identify environmental factors involved in nasopharyngeal and esophageal cancers among the Canadian Inuit.
	Location:	Pond Inlet, Spence Bay, Cambridge Bay, Gjoa Haven, Pelly Bay.

Licence Number

4022	<u>Licensee:</u>	Paul J. Moroz HGH-McMaster Respiratory Research Unit Mail Slot 217 Hamilton General Hospital 237 Barton Street East Hamilton, Ontario L8L 2X2
	Objective:	To conduct an epidemiological survey of the respiratory health status of a statistically significant population of northern native children and then to relate this data to the environmental factors relevant to the respiratory health of these children.
	Location:	Inuvik.
4060	<u>Licensee:</u>	Dr. J.D. O'Neil Faculty of Medicine Dept. of Social and Preventive Medicine 750 Bannatyne Avenue The University of Manitoba Winnipeg, Manitoba R3E 0W3
	Objective:	To conduct preliminary investigation and consultation concerning several health related research projects.
	Location:	Eskimo Point, Whale Cove, Baker Lake, Rankin Inlet, Chesterfield Inlet.
4101	<u>Licensee:</u>	A.P. Hornby Environmental Carcinogenesis Unit B.C. Cancer Research Centre 601 West 10th Avenue Vancouver, B.C. V5Z 1L3
	Objective:	To identify environmental factors involved in nasopharyngeal and esophageal cancers among the Canadian Inuit. This licence is conditional on all substances and drugs used being prescribed by the local physician.
	Location:	Cambridge Bay, Spence Bay, Pelly Bay and Gjoa Haven, Inuvik, Aklavik, Tuktoyaktuk and Paulatuk.

Licence Number

- 4116      Licensee:      Dr. Donald A. Enarson  
Ground Floor, Doctors Residence  
Vancouver General Hospital  
2775 Heather Street  
Vancouver, B.C.  
V5Z 3J5
- Objective:      To establish a surveillance program for  
the early detection of lung cancer among  
a group of workers in the mining and  
smelting industries.
- Location:      Tungsten, Yellowknife, and other mines  
in the Territories.
- 4119      Licensee:      Dr. Jamie C. MacDougall  
Department of Psychology  
McGill University  
1205 Docteur Penfield Avenue  
Montreal, Quebec  
H3A 1B1
- Objective:      To compile a list of all agencies,  
institutions, and individuals who provide  
medical, educational or rehabilitation  
services to hearing impaired children  
in Canada; to profile the relevant  
characteristics of all hearing impaired  
Canadian children from birth to 21 years  
of age.
- Location:      Various settlements in the N.W.T.
- 4128      Licensee:      Geoffrey Smith B.Sc.  
Hatfield Consultants Ltd.  
Environmental and Pollution Management  
201-1571 Bellevue Avenue  
West Vancouver, B.C. V7V 3R6
- Objective:      To determine extent of radioactive  
contamination of abandoned mines at  
Rayrock and Port Radium.
- Location:      Yellowknife - Rayrock - Port Radium.

Licence Number

4126

**Licensee:** Kristen S. Borre  
6 Davie Lane  
Chapel Hill  
North Carolina, U.S.A.  
27514

**Objective:** A dissertation research to examine how Dogrib Dene make diet choices and the kind of work activities they must do to obtain the diet they consume. Possible nutritional problems will be identified and the kind of diet desired by the community will be recorded.

**Location:** Rae-Edzo, Lac La Martre, Rae Lakes and Snare Lake.

4132

**Licensee:** H.F. Pabst, M.D.  
Professor of Pediatrics  
Department of Pediatrics  
University of Alberta  
2C300 Walter Mackenzie Health Sciences Centre  
Edmonton, Alberta  
T6G 2R7

**Objective:** BCG vaccine take in babies with and without maternal PPD sensitization.

**Location:** Inuvik.

4134

**Licensee:** Susan Beaubier  
26 Rycon Drive  
Yellowknife, N.W.T.  
X1A 2V6

**Objective:** To work toward the development of nutrition guidelines specific to the N.W.T.

**Location:** Yellowknife, Frobisher Bay.





Licence Number

4033	<u>Licensee:</u>	Dr. George Wenzel Assistant Professor Centre for Northern Studies and Research McGill University 1020 Pine Avenue West Montreal, Quebec H3A 1A2
	<u>Objective:</u>	Anthropologically define the various dimensional contexts in which ringed seal hunting contributes to the functioning of Inuit society; evaluate the effects the limiting or ideological grounding of the anti-sealing protest movement has done; analysis of Inuit responses to this conflict situation.
	<u>Location:</u>	Holman Island, Clyde River.
4036	<u>Licensee:</u>	Nigel Tucker 2 Assinboine Road Apt. 922 Downsview, Ontario M3J 1L1
	<u>Objective:</u>	To examine the "state-of-the-art" regarding site selection techniques for energy facilities; to visit some of the locations which have previously been identified as potential shorebase sites.
	<u>Location:</u>	Inuvik, Tuktoyaktuk, Aklavik, Fort McPherson.
4042	<u>Licensee:</u>	Dr. R.W. Butler Associate Professor Department of Geography University of Western Ontario London, Ontario
	<u>Objective:</u>	To examine the compatibility of hydrocarbon development and the tourist industry and related resources in the Mackenzie Delta and surrounding area.
	<u>Location:</u>	Norman Wells, Inuvik, Tuktoyaktuk, Aklavik, Arctic Red River, Fort McPherson.

Licence Number

- 4063      Licensee:      Shirleen Smith  
Department of Anthropology  
University of Alberta  
Edmonton, Alberta  
T6G 2H4
- Objective:      To study the use of subsistence products.  
This will involve accompanying people in  
the bush, for example on spring hunt, as  
well as interviewing people in the  
community.
- Location:      Fort Good Hope.
- 
- 4064      Licensee:      Miss Uta Heiermann  
Brenscheder StraBe 32  
4630 Bocum 1  
West Germany
- Objective:      To study the geosocial and geoeconomical  
impacts arising from Beaufort Sea oil  
development.
- Location:      Inuvik, Tuktoyaktuk.
- 
- 4070      Licensee:      Mary J. Taylor  
Carleton University  
Ottawa, Ontario  
K1S 5B6
- Objective:      To study how the mineral projects have  
affected the residents and communities.
- Location:      Nanisivik, Arctic Bay, Frobisher Bay,  
Resolute Bay, Yellowknife, Rankin Inlet.

Licence Number

4082	<p><u>Licensee:</u> Yvonne Gosselink c/o AINA, 11LT University of Calgary 2500 University Drive N.W. Calgary, Alberta T2N 1N4</p> <p><u>Objective:</u> To evaluate northern resources in terms of their cultural, nutritional, psychological and political significance and to look at the cultural, political and ecological aspects of renewable resource use from a historical perspective. The study will attempt to address a list of questions in a Slavey community.</p> <p><u>Location:</u> Fort Liard, Fort Simpson, Nahanni Butte.</p>
4084	<p><u>Licensee:</u> Dr. Douglas R. Stenton Department of Anthropology The University of Alberta Edmonton, Alberta T6G 2H4</p> <p><u>Objective:</u> The collection of oral histories from people in Frobisher Bay as the first step of an investigation into the use of inland resources by prehistoric groups.</p> <p><u>Location:</u> Frobisher Bay.</p>
4087	<p><u>Licensee:</u> Dr. Ludger Muller-Wille Associate Professor Department of Geography McGill University 805 Sherbrooke St. W. Montreal, Quebec H3A 2K6</p> <p><u>Objective:</u> A project to carry out a survey of Inuit place names .</p> <p><u>Location:</u> Pangnirtung and vicinity.</p>

Licence Number

4093	<p><u>Licensee:</u> Irene Mazurkewich Assistant Professor of Applied Linguistics TESL Centre Concordia University 1455 De Maisonneuve Blvd. West Montreal, Quebec H3G 1M8</p> <p>Objective: Research to determine the acquisition process of infinitival and gerundive complements by second language learners.</p> <p>Location: Frobisher Bay (GREC).</p>
4099	<p><u>Licensee:</u> Dr. Joseph Konarek 617 Camelot Drive Sudbury, Ontario P3B 3M9</p> <p>Objective: Economic and socio-economic studies of renewable resources and commercial hunting, fishing, sealing and tourism, also commercial reindeer breeding.</p> <p>Location: Yellowknife and Inuvik.</p>
4100	<p><u>Licensee:</u> Frances Abele Research Associate The Arctic Institute of North America University of Calgary 2500 University Drive N.W. Calgary, Alberta T2N 1N4</p> <p>Objective: To carry out a Native Employment Training Study to study factors that contribute to the success and failure of training programs for native northerners from the perspective of trainees and communities.</p> <p>Location: Norman Wells, Mackenzie Valley communities and Frobisher Bay area.</p>

Licence Number

4103	<u>Licensee:</u>	Judith Jacob General Delivery Snowdrift, N.W.T. XOE 1A0
	Objective:	Documentation of log house community at Da Cho.
	Location:	Artillery Lake area.
4114	<u>Licensee:</u>	Mr. David Wilman Principal Eastern Arctic Teacher Education Program Department of Education Government of the N.W.T. Frobisher Bay, N.W.T. XOA OH0
	Objective:	Research on language acquisition by Inuit children.
	Location:	Arctic Bay.
4122	<u>Licensee:</u>	Dr. Elspeth A. Young c/o Boreal Institute for Northern Studies The University of Alberta CW 401 Biological Sciences Building Edmonton, Alberta T6G 2E9
	Objective:	A study of the provision of retail services in Dene communities.
	Location:	Fort Good Hope, Fort Franklin.
4129	<u>Licensee:</u>	John Bennett Institute of Canadian Studies Carleton University Ottawa, Ontario K1S 5B6
	Objective:	A study of the whaling era and the Inuit point of view in 1984.
	Location:	Pangnirtung.

Licence Number

4133	<p><u>Licensee:</u> Thomas Henley Resource Initiatives 638-92 Quail Ridge Road Winnipeg, Manitoba R2Y 2E9</p> <p>Objective: Research to prepare a strategic plan for renewable resource development in the N.W.T.</p> <p>Location: Yellowknife, Rankin Inlet, Cambridge Bay, Frobisher Bay.</p>
4013	<p><u>Licensee:</u> Pauli Jumppanen Director of Laboratory Laboratory of Structural Engineering Technical Research Centre of Finland Vuorimiehentie 5 SF-02150 Espoo 15 Finland</p> <p>Objective: Collection of snow samples to find out about the spreading of air pollution. Making observations of ice formations and pressure ridges. Observations of clothing for cold air conditions being used by members of the expedition. Behaviour and capacity of man in arctic conditions.</p> <p>Location: Ellesmere Island, North Pole.</p>

ARCHAEOLOGICAL LICENCES



ARCHAEOLOGICAL LICENCES

Licence Number

84-547

Licensee: Jean-Francois Lemouel  
Musee De L'Homme  
Paris, France

Objective: To conduct archaeological  
investigations at the Co-op site  
(Od Pp-2) and archaeological  
reconnaissance on the north shore  
of Prince Albert Sound, Victoria  
Island.

84-548

Licensee: Douglas Stenton  
Department of Anthropology  
University of Alberta  
Edmonton, Alberta

Objective: To conduct archaeological  
investigations at Nettilling Lake,  
Baffin Island.

84-549

Licensee: Margaret Bertulli  
Box 475  
Yellowknife, N.W.T.

Objective: To conduct archaeological  
investigations at Truelove Lowland,  
Devon Island.

84-551

Licensee: Robert R. Janes  
Prince of Wales Northern Heritage Centre  
Government of the N.W.T.  
Yellowknife, N.W.T.

Objective: To conduct archaeological  
investigations at Willow (Brackett)  
Lake, N.W.T.

Licence Number

84-552	<u>Licensee:</u>	Charles D. Arnold Prince of Wales Northern Heritage Centre Government of the N.W.T. Yellowknife, N.W.T.
	<u>Objective:</u>	To conduct archaeological investigations in the vicinity of Eskimo Lakes.
84-553	<u>Licensee:</u>	Christopher Hanks Prince of Wales Northern Heritage Centre Government of the N.W.T. Yellowknife, N.W.T.
	<u>Objective:</u>	To conduct archaeological investigations at sites LfRq-6 and GB-1 near the juncture of the Great Bear and Mackenzie Rivers.
84-554	<u>Licensee:</u>	Christopher Hanks Prince of Wales Northern Heritage Centre Government of the N.W.T. Yellowknife, N.W.T.
	<u>Objective:</u>	To conduct archaeological investigations at Dall Lake and Silverberry Pass in the Mackenzie Mountains.
84-555	<u>Licensee:</u>	Christopher Hanks Prince of Wales Northern Heritage Centre Government of the N.W.T. Yellowknife, N.W.T.
	<u>Objective:</u>	To conduct archaeological investigations at the Franklin Tanks site on Great Bear Lake.

Licence Number

84-556

Licensee: Dr. David Morrison  
Archaeological Survey of Canada  
Ottawa, Ontario

Objective: To conduct archaeological  
investigations in the Anderson Plain,  
including Sandy, Sunny, Jiggle,  
Bathing and Travaillant Lakes.

84-557

Licensee: Dr. Ellen Bielawski  
Prince of Wales Northern Heritage Centre  
Government of the N.W.T.  
Yellowknife, N.W.T.

Objective: To conduct archaeological  
investigations at Roche Bay.

84-558

Licensee: Richard Stromberg  
Department of Anthropology  
University of Toronto  
Toronto, Ontario

Objective: To conduct archaeological  
investigations at the Cache Point  
site (NdPs-1) on Richards Island.

84-559

Licensee: Marc Stevenson  
Prince of Wales Northern Heritage Centre  
Government of the N.W.T.  
Yellowknife, N.W.T.

Objective: To conduct archaeological  
investigations at historic whaling  
stations at Kekerten, Blacklead Island  
and New Boyen (Cumberland Sound).

Licence Number

84-560

Licensee: Father Guy Mary Rousseliere  
Pond Inlet, N.W.T.

Objective: To conduct archaeological  
investigations at Nunguvik (PgHb-1).

84-561

Licensee: Eric Damkjar  
Department of Anthropology  
University of Alberta  
Edmonton, Alberta

Objective: To conduct archaeological  
investigations on the east coast of  
Somerset Island, from Creswell Bay  
to Bellot Strait.

84-562

Licensee: Robert Park  
Department of Anthropology  
University of Alberta  
Edmonton, Alberta

Objective: To conduct archaeological  
investigations at Porden Point on  
Devon Island.

84-563

Licensee: Robert McGhee  
Archaeological Survey of Canada  
Ottawa, Ontario

Objective: To conduct a visual inspection of  
the archaeological sites near Toker  
Point on the Tuktoyaktuk Peninsula,  
and excavation of archaeological sites  
at the mouth of the Horton River and  
at Darnley Bay on Bathurst Peninsula.

Licence Number

84-564

Licensee: Robert McGhee  
Archaeological Survey of Canada  
Ottawa, Ontario

Objective: To undertake a reconnaissance of  
archaeological sites along the southern  
coast of Devon Island.

84-565

Licensee: James Helmer  
Department of Archaeology  
University of Calgary  
Calgary, Alberta

Objective: To undertake archaeological  
investigations in the northern  
coastal zone of Devon Island between  
Truelove Inlet and Cape Hardy.

84-566

Licensee: Dr. Owen Beattie  
Department of Anthropology  
University of Alberta  
Edmonton, Alberta

Objective: To conduct archaeological  
investigations at the Franklin site  
on Beechy Island.

WILDLIFE LICENCES

WILDLIFE LICENCES

Permit Number

840137	<u>Licensee:</u>	David Muirhead Ecology North P.O. Box 249 Yellowknife, N.W.T.
	Objective:	To study the behavior and ecology of ravens and to demonstrate the techniques to the public.
	Location:	Yellowknife area.
840138	<u>Licensee:</u>	Stacy V. Tessaro Dept. of Veterinary Medicine University of Saskatchewan Saskatoon, Saskatchewan S7N 0W0
	Objective:	To examine the presence and spread of disease in bison and to determine the causes of mortality.
	Location:	Mackenzie bison sanctuary and Fort Smith area.
840139	<u>Licensee:</u>	Ray Schweinsburg NWT Wildlife Service Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	To locate radio collared polar bears.
	Location:	Beaufort Sea.
840140	<u>Licensee:</u>	Dr. J.A. Bradley Animal Diseases Research Institute P.O. Box 640 Lethbridge, Alberta T1J 3Z4
	Objective:	To investigate the spread of rabies in the high Arctic and monitor its incidence.
	Location:	Central and High Arctic.

Permit Number

840141	<u>Licensee:</u>	Michael A.D. Ferguson NWT Wildlife Service Department of Renewable Resources Frobisher Bay, N.W.T. XOA OHO
	Objective:	To study the physical reproductive and disease characteristics of reindeer.
	Location:	Belcher Islands.
840142	<u>Licensee:</u>	Doug Heard NWT Wildlife Service Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	To gather data for support of caribou management decisions.
	Location:	Bathurst Caribou range.
840143	<u>Licensee:</u>	Don Thomas Canadian Wildlife Service #1000, 9942-108 St. Edmonton, Alberta T5K 2J5
	Objective:	To study the Beverly winter range and the condition of the caribou on the range.
	Location:	Beverly Caribou winter range.
840144	<u>Licensee:</u>	Cormack Gates Department of Renewable Resources Fort Smith, N.W.T. XOE OPO
	Objective:	Investigate the bison population and habitat.
	Location:	Mackenzie Bison Sanctuary.



Permit Number

840145

Licensee: James F. Voelzer  
U.S. Fish and Wildlife  
700 Cherry St. Suite D  
Columbia, Mo. U.S.A.  
65201

Objective: To determine size and species  
composition of duck populations.

Location: Mackenzie River drainage.

840146

Licensee: Dr. Donald L. Pattie  
N.A.I.T.  
11762 - 106 St.  
Edmonton, Alberta  
T5G 2R1

Objective: Long term monitoring of Arctic bird  
populations.

Location: Truelove Lowland - Devon Island.

840147

Licensee: E. Kuyt  
Canadian Wildlife Service  
#1000, 9942-108 St.  
Edmonton, Alberta  
T5K 2J5

Objective: To determine movements and winter  
range of American Kestrels nesting  
in the Fort Smith area.

Location: Fort Smith area outside Wood Buffalo  
National Park.

840148

Licensee: Jan Adamczewski  
Department of Renewable Resources  
Rankin Inlet, N.W.T.

Objective: To obtain an adequate information base  
for developing a Coats Island Caribou  
Management Plan.

Location: Coats Island.

Permit Number

840149	<u>Licensee:</u>	Karl W. Larsen University of Victoria P.O. Box 1700 Victoria, B.C. V8W 2Y2
	Objective:	Investigate life history of garter snakes in Wood Buffalo National Park.
	Location:	Wood Buffalo National Park.
840150	<u>Licensee:</u>	Ross Eccles LGL Ltd. 770, 205-5th Avenue S.W. Calgary, Alberta T5P 2V7
	Objective:	Provide baseline information on mammal resources affected by proposed Slave River Hydro Development.
	Location:	Slave River Corridor Fort Smith to Slave Delta.
840151	<u>Licensee:</u>	Brian Hayes University College Dublin Belfield, Stillorgan Road Dublin 4, Ireland
	Objective:	To gather information on the summer portion of the High-Arctic Brant life cycle to assist managing Ireland geese.
	Location:	Bathurst Island.
840152	<u>Licensee:</u>	Anne Gunn Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	To describe the current use of the Jackfish wellsite and haul road by Dall's Sheep.
	Location:	Fort Liard.

Permit Number

840153	<u>Licensee:</u>	Kent Jingfors Department of Renewable Resources Cambridge Bay, N.W.T.
	Objective:	Define polar bear denning areas, record signs and sightings of bears, caribou and muskoxen.
	Location:	Prince of Wales Strait, Albert Ed. Bay.
840154	<u>Licensee:</u>	Doug Heard Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	To gather information to support management decisions in respect to the Beverly herd.
	Location:	Beverly herd's range.
840155	<u>Licensee:</u>	Don Phelps Underwood McLellan Ltd. 17007-107 Avenue Edmonton, Alberta T5S 1G3
	Objective:	To determine drainage flow and prime habitat, visit dam sites, determine materials, cost, and design.
	Location:	Tributaries of the Taltson River.
840156	<u>Licensee:</u>	A.J. Gaston Canadian Wildlife Service Ottawa, Ontario K1A 6E7
	Objective:	To gather baseline data on the seabirds of Prince Leopold and Coats Islands.
	Location:	Prince Leopold and Coats Islands.

Permit Number

840157	<u>Licensee:</u> Dr. Ian Stirling Canadian Wildlife Service 1000, 9942-108 Street Edmonton, Alberta T5K 2J5
	Objective: Relate importance of polynyas to overwintering marine mammals and polar bears.
	Location: Resolute Bay.
840158	<u>Licensee:</u> Dr. Frank F. Mallory Laurentian University Department of Biology Sudbury, Ontario P3E 2C6
	Objective: To study population dynamics of fox and prey, rabies, genetics, physiological conditions, reproduction, assess impacts.
	Location: Eskimo Point.
840159	<u>Licensee:</u> Bruce Lyon Department of Biology Queen's University Kingston, Ontario K7L 3N6
	Objective: Determine cost of post-hatch parental care to male phalaropes and advant. of Sabine's social nesting.
	Location: Jenny Lind Island.
840160	<u>Licensee:</u> Dr. Ray Schweinsburg Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective: To determine: subpopulations, sex/age structure, prod., mort., seasonal distribution, estimated population and collect blood.
	Location: NE Baffin - Cape Jameson, south to Cape Dyer.

Permit Number

840161	<u>Licensee:</u>	Gord Stenhouse Department of Renewable Resources Rankin Inlet, N.W.T.
	Objective:	To document summer/winter calf survival, sample overwintering caribou north of Baker Lake, I.D. as Kamin.
	Location:	South Keewatin, Baker Lake, Southampton Island.
840162	<u>Licensee:</u>	Donald Young Environmental Man. Assoc. 1510 Tenth Avenue, S.W. Calgary, Alberta T3C 0J5
	Objective:	Literature, interview component, field investigations.
	Location:	Slave Delta South to Peace River R. De Rocher JN.
840163	<u>Licensee:</u>	Steve Amstrup Department of Renewable Resources Tuktoyaktuk, N.W.T.
	Objective:	Radio collar up to six polar bears in conjunction with the Alaska Fish and Game Department.
	Location:	Beaufort Sea area.
840164	<u>Licensee:</u>	Judith M. Rhymer Department of Bio Science Florida State University Tallahassee, Florida 32306
	Objective:	Investigate interplay of clutch size, egg size, and laying date over a latit. grad. and effect on development.
	Location:	Yellowknife, Inuvik.

Permit Number

840165	<u>Licensee:</u> Ludo C.E. Bogaert Provincial Museum of Alberta 12845-102 Avenue Edmonton, Alberta T5N 0M6
	Objective: To obtain a collection of Arctic material for museum. Do a series of Arctic bird portraits and scenes.
	Location: Devon Island (Truelove Lowland) Cape Vera.
840166	<u>Licensee:</u> Brad Arner Canadian Wildlife Service P.O. Box 637 Yellowknife, N.W.T. X1A 2N5
	Objective: Collect data on bird use on proposed mining site I.D. and map bird use area.
	Location: Bullmoose Lake area.
840167	<u>Licensee:</u> M.G. Knol Department of Renewable Resources Cambridge Bay, N.W.T.
	Objective: Determine the position of the migrational divide in North America between Pacific and Atlantic Sabine's Gulls.
	Location: Cambridge Bay area and possibly Jenny Lind Island.
840168	<u>Licensee:</u> Lynne Dickson Canadian Wildlife Service #1000, 9942-108 St. Edmonton, Alberta T5K 2J5
	Objective: Determine number and distribution of seabirds and bay usage. Determine R-T loon productivity in Beaufort Sea Region.
	Location: Coastline - Tuk Peninsula Mackenzie Delta.

Permit Number

840169	<u>Licensee:</u>	Bob Bromley Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	Locate falcon/eagle/raven nests, determine diet and productivity, band and study movements.
	Location:	All except Pelly Bay and Bathurst Inlet.
840170	<u>Licensee:</u>	Bob Bromley Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	Locate falcons, ravens, and band young falcons, determine numbers and diet.
	Location:	Frobisher, Pangnirtung, Broughton Island.
840171	<u>Licensee:</u>	Bob Bromley Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	Feasibility of intensive gyrfalcon study in spring, locate falcon/raven nests, estimate number of territorial pairs.
	Location:	Pond Inlet.
840172	<u>Licensee:</u>	Bob Bromley Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	Locate raptor/raven nests along rivers. Band as many young as possible without excess disturbance, including adults.
	Location:	Anderson and Horton Rivers.

Permit Number

840173	<u>Licensee:</u> Bob Bromley Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective: Assess viability of release sites by examining prey of falcons for environmental contaminant loads.
	Location: Fort Norman, Norman Wells.
840174	<u>Licensee:</u> Frank Miller Canadian Wildlife Service #1000, 9942-108 St. Edmonton, Alberta T5K 2J5
	Objective: Evaluate current (85-89) numbers of Peary Caribou and muskoxen in High Arctic primarily on Queen Elizabeth.
	Location: Small islands of Barrow Bathurst Prince of Wales, Russell.
840175	<u>Licensee:</u> P.N. Boothroyd Canadian Wildlife Service 501 University Crescent Winnipeg, Manitoba R3T 2N6
	Objective: Determine influence of oilfield expansion on waterfowl use of river and importance of area to water fowl.
	Location: Mackenzie River from Keele River to Tieda River.
840177	<u>Licensee:</u> R. Webb R. Webb Environmental Service c/o Esso Resources Norman Wells, N.W.T. XOE OVO
	Objective: Investigate numbers of migrating waterfowl and use of artificial islands and corresponding open water.
	Location: Norman Wells, Mackenzie River.



Permit Number

840178	<u>Licensee:</u>	Graham Baird Department of Renewable Resources Yellowknife, N.W.T.
	Objective:	Locate/count bears as they emerge from dens along Horton River and coast of Franklin Bay I.D. areas.
	Location:	Paulatuk.
840179	<u>Licensee:</u>	Gordon S. Court University of Alberta 913 Alder Ave, Sherwood Park, Alberta T8H 1V7
	Objective:	Monitor chemical pollutant in imm. and adult falcons and in their primary prey species.
	Location:	Rankin Inlet area.
840180	<u>Licensee:</u>	Dr. Robert D. Montgomerie Department of Biology Queen's University Kingston, Ontario K7L 3N6
	Objective:	Studies of foraging, use of space, and parental care of High Arctic birds in the mating season.
	Location:	Sarcpa Lake, Melville Peninsula.
840181	<u>Licensee:</u>	S. Scott Moorhouse Woodward-Clyde Consultants 13102 Mercury Drive Littleton, Colorado 80124
	Objective:	To study three types of Arctic Gulls in the area of Cape Dorset during July and August.
	Location:	Cape Dorset.

Permit Number

840182	<u>Licensee:</u>	Kevin McCormick Canadian Wildlife Service P.O. Box 637 Yellowknife, N.W.T. X1A 2N5
	Objective:	To determine the distribution, abundance and habit of trumpeter swans in South Nahanni Butte.
	Location:	Nahanni Butte.
840183	<u>Licensee:</u>	Kevin McCormick Canadian Wildlife Service P.O. Box 637 Yellowknife, N.W.T. X1A 2N5
	Objective:	To determine distribution and abundance of moulting geese along rivers.
	Location:	Burnside, Hood, James, Back River(s).
840184	<u>Licensee:</u>	George Paul Dye N.W. Waterfowl Game Farm Rt. 1, Box 669 Everett, Washington U.S.A. 98205
	Objective:	To collect 30 Brant, 10 Kins Eider, 10 Old Squaw, and 12 ptarmigan eggs.
	Location:	Resolute Bay.
840185	<u>Licensee:</u>	James R. Goldsberry U.S. Fish and Wildlife Patuxent Wildlife Research Centre Laurel, M.D. 20708
	Objective:	To capture and band ducks.
	Location:	Mills Lake near Fort Providence.

Permit Number

840186	<u>Licensee:</u>	Paul Kraft NWT Wildlife Service Department of Renewable Resources Inuvik, N.W.T. XOE OT0
	Objective:	To capture 24 beaver and transplant them to Aklavik.
	Location:	Aklavik, Fort Norman, Norman Wells.
840187	<u>Licensee:</u>	Steven Matthews NWT Wildlife Service Department of Renewable Resources Fort Simpson, N.W.T. XOE ONO
	Objective:	Monitor raptors along the Norman Wells Pipeline Project.
	Location:	Norman Wells Pipeline Project.
840188	<u>Licensee:</u>	Keith Howe University of Western Ontario R.R. 5 Aylmer, Ontario N5H 2R4
	Objective:	To collect ducks, geese and ptarmigan.
	Location:	Southampton Island, Eskimo Point.
840189	<u>Licensee:</u>	Austin Reed Canadian Wildlife Service P.O. Box 10100 Ste-Fow, Quebec G1V 4H5
	Objective:	To survey greater snow geese on Somerset Island, band and survey Atlantic Brant on Bathurst and Dewy Soper.
	Location:	Somerset Island, Bathurst Island and Dewy Soper Bird Sanctuary.

Permit Number

840190	<u>Licensee:</u>	Margaret M. Bertulli Northern Heritage Society Box 475 Yellowknife, N.W.T. X1A 2N4
	Objective:	To capture and recapture lemmings, study behavior of Arctic birds, study insect and plant relationships.
	Location:	Truelove Lowlands, Deven Island.
840191	<u>Licensee:</u>	Hugh G. Lloyd Adult Education Centre Igloolik, N.W.T. XOA 0LO
	Objective:	To collect bird specimens male and female.
	Location:	Northern Foxe Basin.
840192	<u>Licensee:</u>	Alex Dzubin Canadian Wildlife Service 115 Perimeter Road Saskatoon, Saskatchewan S7N 0X4
	Objective:	Study breeding ecology of eiders and fulmars, and collect birds as well as document food habits.
	Location:	Cardigan Strait Polyna Devon Island.
840193	<u>Licensee:</u>	David Muirhead Ecology North Box 248 Yellowknife, N.W.T. X1A 2N2
	Objective:	To continue raven banding project.
	Location:	Yellowknife area.

Permit Number

840194	<u>Licensee:</u>	Riley B. McClland University of Montana Missoula, Montana U.S.A. 59812
	Objective:	To conduct aerial surveys of radio collared bald eagles nest sites.
	Location:	Yellowknife area.
840195	<u>Licensee:</u>	Graham Baird NWT Wildlife Service Department of Renewable Resources Inuvik, N.W.T. XOE OTO
	Objective:	To locate and count Dall's Sheep.
	Location:	Richardson Mountains.
840196	<u>Licensee:</u>	G.P. Kershaw University of Alberta Edmonton, ALberta T6G 2H4
	Objective:	To monitor small mammals populations with disturbed habitats along the Dempster Highway.
	Location:	Dempster Highway.
840197	<u>Licensee:</u>	G.P. Kershaw University of Alberta Edmonton, Alberta T5G 2H4
	Objective:	To monitor small mammal populations in the area.
	Location:	MacMillan Pass - Tschui River area.

Permit Number

840198	<u>Licensee:</u>	S.J. Toole Ontario Min. of Natural Resources P.O. Box 190 Moononee, Ontario POL 1Y0
	Objective:	To capture and band up to 3000 Canada Geese.
	Location:	Akimiski Island.
840199	<u>Licensee:</u>	Robert Decker NWT Wildlife Service Department of Renewable Resources Yellowknife, N.W.T. X1A 2L9
	Objective:	To obtain baseline information on distribution of wildlife and their habitat use.
	Location:	Southern Baffin Island.
840200	<u>Licensee:</u>	Rick Ortlieb Kortrisht Wildlife Centre 387 Kortrisht Road Guelph, Ontario N1H 6J3
	Objective:	To collect 30 King Eider and 30 Old Squaw eggs.
	Location:	Prince Patrick and Melville Island.
840203	<u>Licensee:</u>	Norman Nesus University of Utah Department of Biology Salt Lake City, Utah 84112
	Objective:	To investigate interaction of lemmings and their food plants.
	Location:	Igloolik.

Permit Number

840204

Licensee: Duncan M. Cameron  
University of York  
Faculty of Science  
4700 Keele St.  
Downsview, Ontario  
M3J 1P3

Objective: Survey of mammalian fauna and keeping  
of specimens.

Location: Sarcpa Lake region, Melville Peninsula.

840205

Licensee: Mike Ferguson  
NWT Wildlife Service  
Department of Renewable Resources  
Frobisher Bay, N.W.T.  
XOA OAO

Objective: Tag 700 caribou, study effects of tagging,  
observe physical condition, data on age  
and sex composition.

Location: Southern Camsell Bay and Netilling Lake.

840206

Licensee: Len Mychasiw  
Department of Renewable Resources  
Yellowknife, N.W.T.  
X1A 2L9

Objective: Map the vegetation and determine the  
use of various habitats by bison.

Location: Mackenzie Bison Sanctuary.

840207

Licensee: Ken Hudson  
Fort Smith Hunters and Trappers Association  
Fort Smith, N.W.T.  
XOE OPO

Objective: To conduct a beaver transplant.

Location: Traplines 801, 811 & 834 in the  
Fort Smith area.

Permit Number

840208	<u>Licensee:</u>	Anne Gunn Department of Renewable Resources Cambridge Bay, N.W.T. XOE OCO
	Objective:	Determine the number of muskoxen and grizzly bears east of Bathurst Inlet.
	Location:	Bathurst Inlet.
840209	<u>Licensee:</u>	Dr. Thomas Smith Renewable Resources Training Program Thebacha College Fort Smith, N.W.T. XOE OPO
	Objective:	Collect up to 16 common or King Eiders or a combination there of for training purposes.
	Location:	Minto Inlet on Victoria Island.
840210	<u>Licensee:</u>	Gord Stenhouse Renewable Resources Regional Biologist Rankin Inlet, N.W.T.
	Objective:	To capture, tag and mark polar bears for estimating their population in Foxe Basin area.
	Location:	Southampton Island, Coats Island.
840211	<u>Licensee:</u>	Doug Heard Renewable Resources Caribou/Wolf Biologist Wildlife Population Management Yellowknife, N.W.T.
	Objective:	To immobilize up to 10 barren ground caribou and to place radio collars on the immobilized caribou.
	Location:	Keewatin district.



Permit Number

840212	<u>Licensee:</u>	John Bailey Renewable Resources Assistant Regional Superintendent Frobisher Bay, N.W.T.
	Objective:	To live capture and band passage gyrfalcons and peregrine falcons.
	Location:	Clyde River.
840213	<u>Licensee:</u>	Kent Jingfors Regional Biologist Renewable Resources Inuvik, N.W.T.
	Objective:	To determine early winter distribution and abundance population characteristics and habitat use of moose.
	Location:	Mackenzie River Valley West of Norman Wells.
840214	<u>Licensee:</u>	Anne Gunn Regional Biologist Renewable Resources Cambridge Bay, N.W.T.
	Objective:	To determine the number and distribution of grizzly bears in the Coppermine area.
	Location:	Cape Young (E) to Port Epworth, (S) to A. Circle.
840215	<u>Licensee:</u>	Dr. J.A. Bradley Animal Diseases Research Institute Box 640 Lethbridge, Alberta T1J 3Z4
	Objective:	To monitor the incidence of rabies in the High Arctic to provide information to medical services of NWT.
	Location:	Banks Island, Cambridge Bay, Gjoa Haven, Spence Bay.

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1984

Permit Number

840216	<u>Licensee:</u>	Anne Gunn Regional Biologist Renewable Resources Cambridge Bay, N.W.T.
	Objective:	To immobilize and ear-tag up to 20 muskoxen and to locate and observe tagged muskoxen.
	Location:	Southeast Victoria Island.
840217	<u>Licensee:</u>	Michael Ferguson Regional Biologist Renewable Resources Frobisher Bay, N.W.T.
	Objective:	To estimate the number and distribution of South Baffin caribou.
	Location:	South Baffin Island.
840218	<u>Licensee:</u>	Marc Cattet Department of Zoology University of Alberta Edmonton, Alberta T6G 2E9
	Objective:	To accompany hunters and collect data at kill sites of polar bears and collect carcasses at check station.
	Location:	Coral Harbour area.
840219	<u>Licensee:</u>	Steve Matthews Pipeline Monitoring Biologist Renewable Resources Box 240 Fort Simpson, N.W.T.
	Objective:	To conduct ground surveys to determine ungulate and furbearer movements and distribution along pipeline.
	Location:	Norman Wells pipeline area.