

RESEARCH HIGHLIGHTS

Spring 2001

RESOURCE HARVESTING PLANNING SESSION

In March the Institute held a one-day planning session to scope out the issues relating to a potential Resource Harvesting Study. Susan DeLisle served as the Project Coordinator for this session that was held at the Aurora Hotel in Happy Valley-Goose Bay. Working with the Socio-Economic and In-Town Mitigation Committee, Ms. DeLisle was responsible to prepare a Briefing Package to be distributed to all potential participants for review prior to the session and to take care of the logistics for the day.

In putting together a participant list for the session, an attempt was made to be as inclusive as possible without making the session unworkable. Invitations were extended to governments, organizations, and communities with an interest in the military flight training area.

Lesley Griffiths facilitated the session, with Tony Williamson and Natalie D'Astous present as technical advisors for the 34 participants.

The objectives for the session were to:
 a) establish a common ground, or level of understanding, on the type of Institute sponsored Resource Harvesting study that could be embarked on, and
 b) to set in place a process for achieving this objective.

As a result of the session, a cautious agreement has been expressed for the Institute to further explore the groundwork for a Resource Harvesting Study. Some major points identified throughout the day included:

- * The necessity to develop confidentiality agreements and the protection of Intellectual Property rights of those who choose to participate.
- * Participation is not mandatory and withdrawal from the study is a prerogative.
- * The Institute will draft an "Expression of Intent" and "Call of Interest" for review and comment by the governments, communities, and organizations with an interest in the military flight training area.
- * Once a greater level of confidence and commitment is achieved, the Institute will prepare a draft Research Plan for a 2002 study period.

The services of Susan DeLisle have been retained to initiate the next step in the process. During April and May, Ms. DeLisle will continue to work with the Socio-Economic & In-Town Mitigation Committee to contact the interested parties for review and comment on an "Expression of Intent" and Call of Interest" to proceed.

Inside this issue:

Resource Harvesting	1
Red Wine Census	2
What's New	2
Ashkui Symposium	3
Graduate Student	4
Waterfowl Research	4
IEMR Staff	4
Contact Information	4

2001 CENSUS OF THE RED WINE MOUNTAINS CARIBOU HERD, CENTRAL LABRADOR

Throughout their circumboreal range, sedentary populations of woodland caribou (*Rangifer tarandus*) appear to be in decline; last year the federal advisory board COSEWIC (Committee on the Status of Endangered Wildlife in Canada) recognized this decline by designating most boreal populations of woodland caribou as threatened. In Labrador, population declines in the Red Wine Mountains Caribou Herd (RWMH) and the Mealy Mountains Caribou Herd have been documented in the past two decades. Detailed censuses of the RWMH throughout the 1980's consistently



Photo by Colin Jones

estimated about 700-800 animals in the herd. The most recent census in 1997, however, showed a dramatic decline to an estimated 129 animals. Coupled with the apparent decline in population size, and the recent designation by COSEWIC, a study to assess the herd's current demographics was deemed critical.

In March, the Institute in partnership with Department of National Defence (DND) and the Newfoundland and Labrador Inland Fish and Wildlife Division (IFWD) conducted an aerial survey of the RWMH in order to obtain a current estimate of how many caribou comprise the Red Wine Mountains herd.

The survey produced an estimated population size of 97 woodland caribou in the RWMH, with a 90% confidence interval of 72-189. Given similarly obtained population size estimates of the RWMH for 1997 and

2001, it appears that the herd has declined in the order of 29.7% between 1997 and 2001. At this level of change, the RWMH has declined the rate of 7.4% per annum between 1997 and 2001.

Clearly, the RWMH is still in a precipitous state of decline, which began at some time after 1989. It is interesting to note that an estimated 6-8 wolf packs were encountered within the study area during the aerial survey. The large density of wolves may be limiting the RWMH. However, other possible reasons for decline include: displacement to an expanding moose population, overharvest, habitat degradation, egress to the George River herd, predation by black bears, or a combination thereof.

WHAT'S NEW?

- * In March 2001, Mr. Daniel Ashini resigned his seat as a Board member. Mr. Ben Michel has assumed the position as representative for the Innu Nation.
- * Institute staff, Maureen Baker and Colin Jones, attended *Directions North: Labrador in the New Century* from March 29-31, 2001. This conference examined Labrador as a northern region and the partnerships and opportunities arising from looking at issues from that direction.
- * With the assistance of a Science Horizons Grant from Environment Canada, the Institute has hired an Assistant Wildlife Biologist, Ms. Corinne Wilkerson. Ms. Wilkerson has a B.Sc. in Natural Resource Conservation from the University of British Columbia. She will provide field assistance on Institute sponsored waterfowl research this coming field season, and develop communications material related to the research.
- * Congratulations to Natasha and Barry Canning on the birth of their son Mark Michael George Canning on April 10, 2001.

ASHKUI PROJECT SYMPOSIUM

Knowledge, Culture, and the Innu Landscape

On January 25, 2001, the Ashkui Symposium was held at Saint Mary's University, in Halifax, Nova Scotia. This symposium brought together Innu Elders and leaders, and academic and government researchers who have been involved in the "Labrador Project". The project is a multidisciplinary, collaborative study of the landscape of Nitassinan (Labrador) as known to the Innu. The objective is to use variety of methods, from Innu Knowledge, science, and social science, to gain a broad understanding of the ecology of Labrador and its significance to the people who live there. The work to date has focused on areas known as "ashkui".

Ashkui are areas of early or permanent open water on rivers, lakes, and estuaries; and contemporary Innu Camps are often found close to them. Ashkui are part of the cultural landscape in that the Innu know about them in great detail from multigenerational and personal experiences of living with and from the Land. From a biophysical perspective ashkui are multifaceted processes and terrestrial/aquatic features. A multidisciplinary approach to ashkui must bridge the

biophysical and cultural dimensions of the landscape if the perspectives of Innu, scientists, and social scientists are to be mutually coherent. This symposium addressed the specifics of the work



Photo by Bruce Turner, CWS

done to date and broader issues in which the work takes place.

"The Ashkui Symposium provided an important opportunity to informally engage in interesting discussions with other persons engaged in research in the Labrador Environment."

**T. Jung
IEMR**

the Ashkui project and gained a better perspective of Innu knowledge of Ashkui, cultural signifi-

cance of landscape to the Innu, and ways in which to conduct respectful research and integrate, where feasible, western and traditional ways of knowing. Mr. Jung notes the number of Innu persons that were speakers and truly felt this was an information-sharing session. The Ashkui Symposium provided an important opportunity to informally engage in interesting discussions with other persons engaged in research in the Labrador Environment.

As a Board member of the Institute, Hilda Letemplier representative for the Central Labrador Economic Development Board, found the Symposium

to be beneficial as it provided an opportunity for her to listen and to learn about the Innu perspective on Ashkui. Like many in attendance, Ms. Letemplier was impressed with the Innu speakers and was aware that when the Innu presented you could hear a pin drop in the room. In conversation with other delegates, many people felt that the delivery of the speeches was well done and given much contemplation instead of giving too much information in a short time which can be very overwhelming. Ms. Letemplier thanks the Institute for their support and looks forward to future events as a Board member.

INSTITUTE FOR ENVIRONMENTAL MONITORING AND RESEARCH

P.O. Box 1859, Str. B
Happy Valley - Goose Bay, Labrador
A0P 1E0

Phone: 709-896-3266
Fax: 709-896-3076
Email: iemr@hvgb.net
www.mun.ca/iemr

WATERFOWL EFFECTS RESEARCH

The effect of low-level jet aircraft training on waterfowl has been an outstanding issue among scientists, resource managers and local communities since the inception of military training activities in Labrador. Research elsewhere has demonstrated that aircraft disturbance may significantly alter time-activity budgets, chick growth rates and habitat use, as well as elicit potentially detrimental overt reactions such as habitat abandonment and flushing. Predicted impacts are particularly worrisome when they involve species-at-risk, such as the endangered Harlequin Duck. Furthermore, overt behaviours such as flushing pose a significant threat to pilots, whom may strike flocks of large-bodied birds that are disturbed. To address these issues in the Quebec-Labrador environment will require a substantial multi-agency effort.

In 2001, the Institute, in conjunction with the Canadian Wildlife Service, Department of National Defence, Memorial University, McGill University, Innu Nation, University of British Columbia, and Jacques Whitford Environment Limited, will embark on three projects designed to test hypotheses of the effects of low-level jet overflights on waterfowl. Namely:

1. A study of the effects of overflights on spring staging waterfowl communities at Seal Lake, Labrador

NEW GRADUATE STUDENT

Ms. Tina Newbury will be conducting the study on effect of low-level overflights on spring staging waterfowl for her Master of Science thesis in Wildlife Ecology at McGill University. Dr. Rodger Titman of McGill University and Dr. Greg Robertson of the Canadian Wildlife Service will supervise Ms. Newbury.



Ian Goudie, Ph.D. Candidate at MUN, releasing juvenile Harlequin Ducks at Fig River, Labrador,

2. On-going studies of the effects of overflights on Harlequin Ducks at Fig River and Crooked River, Labrador

3. A study of the effects of overflights on moulting Black Ducks at Fourmont Lake, Labrador

The component studies form an integrated package of research projects aimed at addressing the issues identified by local people and scientists. Individual research plans and budgets have been developed, and while each component study differs slightly in scope and methodology, the general thrust is to examine behavioural changes as a result of low-altitude overflights, if any. The goal is to provide data suitable to statistical models that will relate behaviour to noise output or linear distance of the aircraft. Significant statistical models will serve as scientific proof of an impact and serve as the basis for designing mitigation strategies to protect both waterfowl and pilots.

IEMR STAFF

Moncton, New Brunswick

Louis LaPierre, Ph.D.
Institute Chair

Gloria Belliveau
Executive Assistant

Happy Valley- Goose Bay,
Labrador

Maureen Baker
Administrative Manager

Darlene Jacobs
Secretary

Thomas Jung
Research Wildlife Biologist

Colin Jones
Wildlife Biologist

Tony Parr
GIS Specialist

Corinne Wilkerson
Assistant Wildlife Biologist

Research Highlights

Information for this issue of Research Highlights was provided and compiled by Institute staff. If you have any comments or if you have information you would like to see included, please contact the Institute's office.