The Seventh North American Caribou Conference, Thunder Bay, Ontario, Canada, 19–21 August, 1996.

The Northeast Region Standing Committee on Woodland Caribou (NERSC): an example of a co-operative management partnership

George D. Hamilton^{1*} & Colin Edey²

- Alberta Environmental Protection, Natural Resources Service, #416, 5025 49 Avenue, St. Paul, Alberta T0A 3A4, Canada (stpwild@env.gov.ab.ca).
- NOVA Gas Transmission Ltd. 801 Seventh Avenue S.W., P.O. Box 2535, Station M, Calgary, Alberta T2P 2N6, Canada.

Abstract: This paper describes the history and current status of NERSC (Northeast Region Standing Committee on Woodland Caribou), a government/industry partnership established to address issues related to industrial development and the conservation of woodland caribou (Rangifer tarandus caribou) in northeastern Alberta. In mid 1991, NERSC was established with broad participation from the oil and gas and forestry industries and relevant government agencies. Its primary role has been as an advisory body to the government through the regional environmental resource management committee. Since its inception, it has become an open forum for the annual review of industrial operating guidelines based on adaptive management. NERSC has been highly successful at attracting financial support from various sponsors and co-ordinating appropriate research and monitoring programs. Key achievements include: 1) greatly enhanced understanding of problems, issues and positions among its diverse membership related to resource development and caribou management; 2) greatly enhanced delineation of important caribou habitats, and improved understanding of population status and limiting factors; 3) modified and more effective land use strategies; and 4) a recognized collaborative partnership.

Key words: Rangifer tarandus caribou, oil and gas industry, forestry, industrial development, environmental impacts, mitigation.

Rangifer, Special Issue No. 10, 231–234

Introduction

The distribution of woodland caribou (Rangifer tarandus caribou) in North America has shrunk substantially since European settlement (Bergerud, 1974). Various causes have been suggested and debated, but it appears likely that human activities such as logging, agriculture, infrastructural development and settlement have generally been contributing factors. In Alberta, sport hunting for caribou was ended in 1981 due to concerns that the population was declining. Extensive oil and gas development throughout the 1980s, along with major commitments of timber, heightened concern and created an environment in which government

agencies felt obliged to adopt a more restrictive posture towards regulatory approvals.

The primary emphasis was on reducing mid- to late-winter disturbance by placing timing restrictions on industrial activities in known caribou ranges. Other measures included limiting the usability of new seismic lines for public or predator travel by "rolling back" woody debris and reducing snowplowing, line widths, lines of sight, etc. Industrial operators typically saw these restrictions as onerous and costly, resulting in numerous disagreements. In 1991, the Alberta Government approved a "Procedural Guide for Oil and Gas Activity on Caribou Range" (Information Letter 91.17) which

^{*}corresponding author.

established a policy framework allowing for a more constructive approach. Its most important principles were:

- 1. Industrial development could occur on caribou range, provided that the integrity of the habitat was maintained to support its use by caribou.
- 2. Government and industry should co-operate in finding and applying solutions which satisfactorily addressed the concerns of both parties. In particular, regionally-based committees should be established to provide a forum for moving forward.

Formation of NERSC

Following a series of preparatory meetings and discussions in 1991, NERSC (Northeast Region Standing Committee on Woodland Caribou) was formally established with a five-year mandate to be an advisory body to the regional environmental resource management committee. Its original members represented eight oil and gas companies, one forestry company and six government agencies. Its objectives were:

- 1) to foster co-operation between government and industry.
- to share information on environmental and industrial needs.
- 3) to identify issues, define problems, and seek resolution.
- 4) to tecommend effective and practical operational guidelines.
- 5) to develop area-specific plans to achieve caribou conservation while meeting the needs of industry.
- 6) to identify and address research and information priorities.

NERSC is co-chaired by one industry representative and one government (wildlife agency) representative. Typically, it has met twice per year. Its central focus has been on considering advice from various subcommittees and making recommendations regarding operational guidelines for the upcoming winter field season. Decision-making is by consensus, and recommendations are brought forward to the government environmental tesource managers' committee for adoption and implementation.

Achievements

NERSC has been considered a significant success by its participants in three particular areas: 1) research

and information acquisition; 2) communication and information sharing; 3) co-operation and improved understanding among its members.

1) Research

The most important issue for NERSC has always been the search for effective, efficient operational guidelines. The rules in place prior to 1993 had focused on terminating industrial activity in identified caribou ranges after January 15 in order to minimize mid- to late-winter disturbance. Debate on the reasonableness of this approach demonstrated that new information from field research would be required to justify changes. Work of this type, in turn, would cost a significant amount of money. NERSC established a funding subcommittee to gather and manage funds, and a research subcommittee to priorize and oversee research activities. Since its inception, NERSC has been able to attract a total of \$1,200,000 for research related to woodland caribou. The source of these contributions has been roughly: industry (54%); Alberta government (16%); NSERC and other funding agencies (30%); non-governent organizations (<1%).

Major research initiatives have included: 1) a study of caribou behaviour in response to disturbance from simulated seismic exploration (Bradshaw, 1995); 2) habitat selection by caribou, as determined by radio-telemetty (Bradshaw *et al.*, 1995); 3) an examination of population structure and status in relation to different landscape types (Stuart-Smith *et al.*, 1997). In addition, work is currently underway on habitat use by moose (*Alces alces*), wolves (*Canis lupus*) and caribou in relation to roads and seismic lines in caribou range.

Taken togethet, these and other information-gathering efforts have resulted in: much more precise caribou range maps for northeastern Alberta; a better understanding of disturbance effects and population status; a significant relaxation of timing restrictions (to March 1).

2) Communication

NERSC has made a point of keeping its members and all other interested parties informed of its activities and achievements. It produces an annual newsletter, an occasional research newsletter, and has produced two pamphlets, an internet home page, and three videos for general public use. Presentations and posters have been provided at conferences and other functions, and information sessions have been held with senior company and

government officials. NERSC meetings have been open to non-members, and membership itself has expanded to include representation from the horticultural peat industry and several additional energy and forestry companies.

3) Co-operation

The most significant achievement of NERSC is that it has provided a forum for co-operative problem solving for government and industry. In its five-year history, NERSC has seen the number of conflicts greatly diminished and replaced by a significant level of trust and openness amongst its members. Discussion has been candid and problems have usually been addressed directly. Most members have been impressed by the commitment which has been demonstrated by the whole membership in continually moving towards workable solutions. At the end of its five-year mandate earlier in 1996, the membership agreed that NERSC had been a substantial success and that it should be continued to the end of 1999.

Challenges

Even though NERSC has so far been seen as a positive effort, it has not been without difficulties. These include:

1) Time commitment

NERSC relies on consensus decision-making and requires thorough consultation and communication between many individuals tepresenting numerous agencies and interests. This requires what frequently seems to be an inordinate amount of time to get things done. Although this can be a source of frustration, it has to be kept in perspective. The alternative would likely be a similar amount of time engaged in repetitive conflicts without the benefit of new information or productive discussion. Most NERSC members seem to have reached similar conclusions, since they frequently display a surprising level of commitment to the whole endeavour.

2) Compliance

NERSC has focused on developing practical, effective operating guidelines to accommodate the needs of woodland caribou with those of industry. Even though all members are involved on an annual basis in reviewing and ratifying these guidelines, not all companies have demonstrated an equal commitment to applying them conscientiously at all times.

This has strained the fabric of NERSC from time to time, but it has also brought out one of its strengths. NERSC is an advisory body with no power to enforce compliance. However, peer pressure from within its tanks has frequently been successful in bringing things back into line and maintaining a level playing field for all operators. From a government perspective, this has been one of the more surprising and gratifying features of the whole experiment.

3) Access management

Access management was recognized as a priority even before NERSC's establishment. More access encourages more poaching and aboriginal hunting, more vehicle collisions and more disturbance. Although the guidelines call for effective access management as a key component of industrial operations in caribou range, it has nevet been easy or straightforward to achieve this goal. Native and non-native members of the public typically resent restrictions on their use of Crown land, and frequently ignore signs, gates and other access management measures. In addition, there is a real reluctance to create new rules and restrictions, particularly if strong public support cannot be demonstrated. NERSC has not found a simple solution, (it is not alone in this regard), but it has now recognized this as its most pressing challenge.

4) Funding

Although its ability to fund and conduct research has been one of NERSC's most notable successes, it is now at a point where its members, particularly on the industrial side, are expressing a growing reluctance to continue contributing money at previous levels. The typical concern is that NERSC might become simply a source of funds for graduate students and other researchers, and that research must bear some clear relation to solving the problems of the NERSC membership. These are recognized as legitimate concerns, and steps are being taken to ensure that the research program, and its required funding, are understood and supported by the members.

New directions

1) Research program

Several new developments are changing the research program. First, it has recently been amalgamated with the research program of the Northwest Region

Standing Committee, so that there will be a coordinated approach and more efficient use of resources across the boreal caribou range of Alberta. Second, a co-ordinator has been hired under an industrial post-Doctoral fellowship program to: i) co-ordinate the amalgamated research programs; ii) conduct research; iii) manage the research budget; and iv) become a central source of information regarding the research program and its budget.

It is too early to tell how this will work out, but these measures were adopted to address several concerns, including: potential duplication of effort between two regions; confusion regarding status of individual projects or of the overall direction of the whole program; and excessive demands on a few individuals to manage large budgets "in their spare time."

2) Community:participation

In response to the five-year review by NERSC of its objectives, access management was identified as a priority area which had not been successfully addressed. To meet this challenge, a new subcommittee has been created with a mandate to explore ways of developing direct involvement in NERSC by aboriginal communities and other stakeholders. This initiative has just now started, so it is impossible to provide more details. It is likely that any successful expansion of NERSC beyond its traditional membership (government and industry) will fundamentally change it in ways that cannot be predicted. It is also likely (and desirable) that stakeholders from the general public will be interested in more than access management.

Summary

In summary, the 5-year NERSC experiment has achieved some significant successes, especially in developing understanding between government and industry and in developing co-operative approaches to solving problems. Following a review of its mandate, the members agreed that it had been substantially worthwhile, and felt that it was worth continuing for another five years.

There have been stresses and strains, but the overall conclusion is that this partnership approach has proven highly beneficial to its members, especially in contrast to the confrontational approach which preceded it.

References

- Bergerud, A. T. 1974. Decline of caribou in North America following settlement. *J. Wildl. Manage.* 35: 71–75.
- Bradshaw, C. J. A. 1994. An assessment of the effects of petroleum exploration on woodland caribou (Rangifer tarandus caribou) in northeastern Alberta. M. Sc. Thesis, Univ. of Alberta, Edmonton, Alberta. 121 pp.
- Bradshaw, C. J. A., Hebert, D. M., Rippin A. B., & Boutin S. 1995. Winter peatland habitat selection by woodland caribou in northeastern Alberta. *Can. J. Zool.* 73: 1567–1574.
- Stuart-Smith, A. K., Bradshaw, C. J. A., Boutin S., Hebert D. M., & Rippin, A. B. 1997. Woodland caribou relative to landscape patterns in northeastern Alberta. J. Wildl. Manage. 61 (3): 622–633.