

CARIBOU HABITAT PROTECTION: IT'S URGENT TO REDUCE INDUSTRY'S BOOTPRINT

BY CAROLYN CAMPBELL, AWA CONSERVATION SPECIALIST



Essentially zero – AWA has learned this has been the calf survival rate in Alberta's Cold Lake woodland caribou herd for the last four years. This is a shocking statistic. But it's hardly surprising given the intensive *in situ* tar sands industry activity promoted in this caribou population's range. In 2010, the Alberta government's caribou status update report showed the Alberta side of the Cold Lake herd's population was merely 20 percent of what it had been in the mid-1990s; across the border in the comparatively less developed Saskatchewan side of the herd's range the population was at 65 percent of its mid-1990s level (energy industry activity has greatly increased on the Saskatchewan side since 2007, with corresponding declines in caribou populations there).

What future is possible for this and other Alberta herds? Here we examine the current state of provincial and federal measures, including Alberta's current wolf kill program in west central Alberta. Meaningful habitat protection and restoration are notably absent from those measures. It is urgent that they be added.

Woodland caribou eat lichen and favour large peat wetland areas and lichen-rich old forests; these wet or snowy areas in the intact boreal forest are inhospitable to other prey species such as deer and moose. Such an intact, unfragmented landscape helps to separate the caribou from wolves and bears. Today, seismic lines, well sites, camps, forestry cutblocks and busy roads fragment huge, growing swaths of Alberta's boreal forest. With this industrial "disturbance," deer and moose are drawn into previously inaccessible forest in unprecedented numbers and wolf populations grow accordingly. In addition, cutlines and roads give wolves and bears easy access, easy pathways, to caribou. Sadly, predation on adult and young caribou is unsustainably high. Caribou

population trends are a barometer of boreal forest intactness that affects many other species. The barometer doesn't suggest a sunny tomorrow.

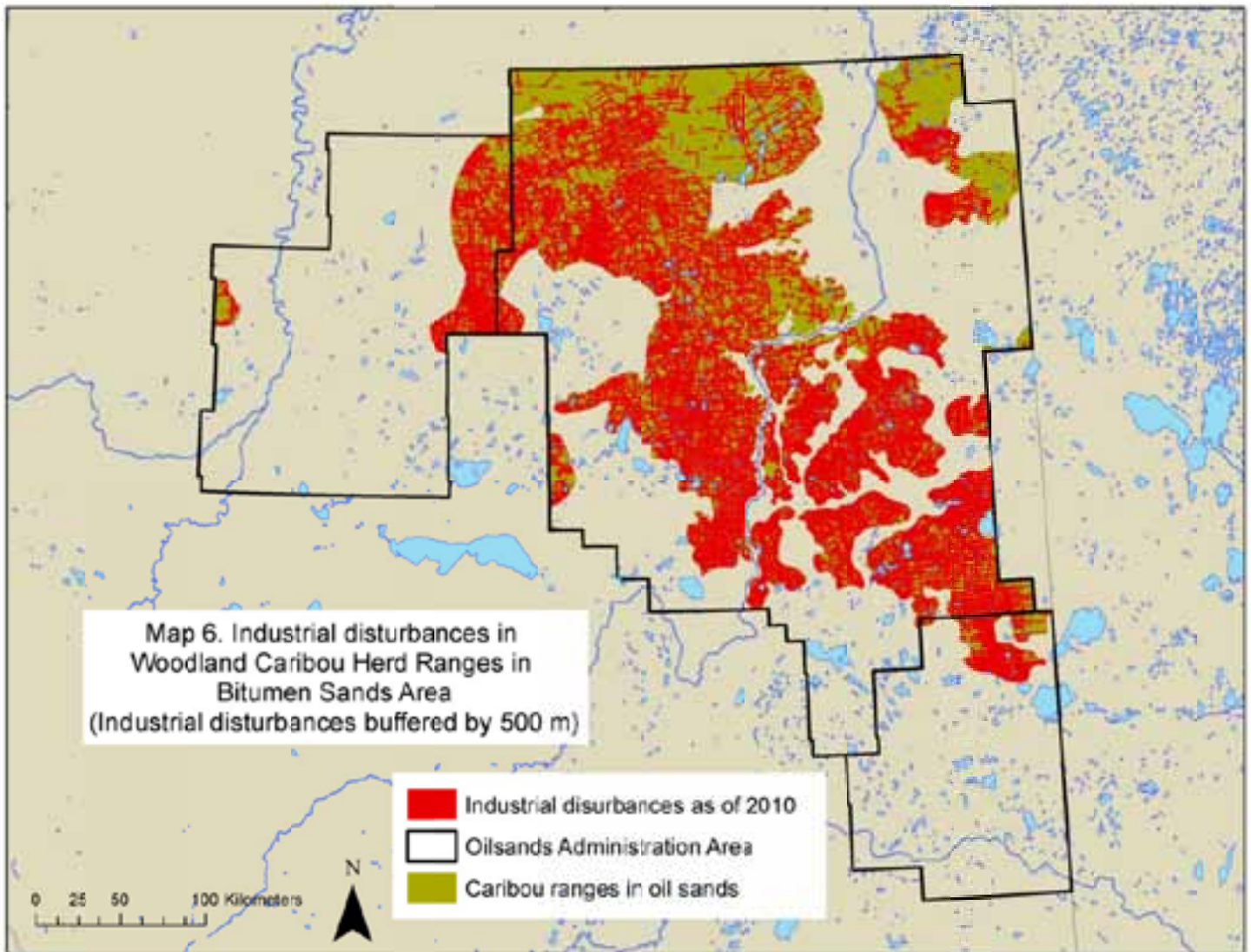
The Alberta government's woodland caribou Status Report (2010) showed population declines for almost all adult boreal woodland caribou populations. The Athabasca Landscape Team of scientists reported to the Alberta Caribou Committee in 2009 that there was an urgent need for both caribou habitat restoration and mortality management measures to be applied **together**, or caribou would not persist for more than several decades in Alberta. They made specific habitat recommendations: establish large industry-free caribou recovery areas, coordinate large scale habitat restoration programs, and reduce the new industrial footprint in active lease areas. Their mortality management recommendations were to kill at least two-thirds of wolves in an area annually (stated as the most effective mortality management strategy). The possibility was raised of penning cows and calves although there were concerns about the value, feasibility and cumulative stress on the caribou of this latter approach.

The years pass and there still has been no significant habitat protection and restoration – none, zero. The provincial government's Lower Athabasca regional land-use plan in northeastern Alberta remains a proposal only. It timidly proposes that caribou range protected from industry rise from the current seven percent to about 17 percent of caribou range in that region. But this expansion only may be allowed at the fringes of bitumen deposits. According to Environment Canada, woodland caribou require 65 percent intact habitat to have a 60 percent chance of survival. The Lower Athabasca plan would be a very modest improvement over the status quo but will likely not significantly increase caribou survival prospects.

The plan also falls far short of promised responsible cumulative effect management: it has neither land disturbance limits nor a biodiversity strategy; it protects bitumen rather than caribou. Meanwhile, both federal and provincial governments facilitate, if not promote, as much new gas, oil, heavy oil and bitumen exploration and development as the market will bear. As of January 2012, 65 percent or 91,000 km² of Alberta's entire oil sands area was under bitumen lease. Global Forest Watch Canada reported then that half of Alberta's bitumen leases, as of July 2011, were within caribou ranges. Industrial disturbances (buffered by 500 meters) cover an average 64 percent of the ranges of the eight Alberta caribou populations in the bitumen sands region.

Crying Wolf?

A wolf control program aimed at trying to protect the Little Smoky caribou herd has been applied for six seasons now in the west central Alberta foothills. Predator management with strong caveats was part of a provincial caribou recovery plan developed by a team of government, industry and environmental representatives. The Alberta Government adopted most of this plan in 2005 as Alberta's Woodland Caribou Recovery Plan; the one recommendation it did not adopt, unfortunately, was a temporary moratorium on new mineral and forestry leases in the lands used by the Little Smoky and two other Alberta caribou herds then at immediate risk of local extinction. The 2005 Plan stated bluntly that "habitat conservation and management is the fundamental tool to reduce undue predation on caribou." It added that predator control "must be predicated on land management and habitat restoration procedures (appropriate for caribou recovery) being in place, or



The current extent of industrial disturbance in caribou ranges in Alberta’s oil sands region makes it urgent to establish land disturbance limits and strong habitat protection and restoration measures.
 Map: Global Forest Watch Canada, 2012.

under development,” that “there is strong social reluctance to rely on this tool,” and that “predator control will not succeed as a sole, or predominant, tool for caribou recovery.”

I spoke to Dave Hervieux, the Provincial Caribou Management Coordinator in Alberta Sustainable Resource Development, for information on the Little Smoky caribou recovery program. He stated categorically that “without wolf control, the Little Smoky caribou herd would have been completely lost by now.” Due to forestry and energy industry disturbances attracting deer, moose and wolves, the Little Smoky population had declined by between 10 and 20 percent every year from the late 1990s to the mid 2000s. Wolf control for Little Smoky began in the winter of 2005/06. From

the first season of the wolf program, the annual survival of caribou calves and adults improved greatly. The caribou population stabilized and began to grow; it is now believed to be about 80 animals. “That is a success”, Hervieux states. “It is best to retain caribou within their range, as population re-establishment after local extinction is unproven and would be extremely difficult or impossible.”

Hervieux strongly defends the elements of the Little Smoky predator management program; from 2005 to 2012 this program has killed about 650 wolves. First, he notes that the only responsible way to manage predators is comprehensively, so it will actually stabilize caribou populations. He states that “there is no point to control wolves if it is done in a manner that will not achieve the desired

result of avoiding the complete loss of a caribou population by allowing the population to be stable or to grow; predator management should be effective or not done at all.” The government’s approach targets whole packs rather than disrupting pack structure and thereby stimulating wolf reproduction. Simply trapping would play this stimulating role. The government relies on helicopters to shoot wolves from the air for most of the kills. But this method requires optimal snow and visibility conditions to spot and follow tracks.

So for some of the kills, Hervieux states that they rely on trained professional staff for a tightly regulated poison (strychnine) bait program—about 100 wolves have been killed this way since 2005. To minimize collateral damage and accidentally killing

other species, the only poisoned baits are small bait pieces buried in the snow that only canine species could be expected to find. The bait sites are identified with public warning signs. “The only way for someone’s dog to be affected is for the owner to allow them to run loose in caribou range, which definitely should not be happening,” states Hervieux. The larger bait that draws ravens and in turn attracts wolves and other species to the site is not poisoned. Accidental mortality of other species is carefully tracked and thankfully so far has been very low. For example, for 1,041 bait-site-days in the 2011-2012 winter season, there were 23 accidental raven mortalities, five accidental coyote poisonings, and one red fox mortality. Hervieux says this data is very comparable to previous years’ figures.

In defending the Little Smoky wolf control program, Hervieux underlines that the wolf kill is not intended to be the sole caribou management tool. He notes that the recent caribou policy adopted by the provincial government in June 2011 lists an immediate priority to maintain caribou habitat. But Hervieux is adamant that some wolf control work is necessary along with habitat protection and restoration. “Without the ability to use focused, careful and effective predator management as one of the caribou management tools, many woodland caribou populations in Alberta will not survive much longer. We would consciously be choosing for extirpation of caribou populations if we choose not to employ careful predator management. The problem is that without a relief from excessive mortality levels, most caribou populations will not persist until habitat is adequately restored.” Hervieux states that since the Little Smoky wolf control program began there has been very little new forestry industry footprint in the more intact parts of the Little Smoky caribou range, which is a significant change from what company cutting plans might otherwise have been.

AWA decided it could not support the wolf kill in the Little Smoky range since insignificant habitat protection and restoration accompanied it. Specifically, oil and gas leasing, exploration and development have continued unabated. While some forestry cuts have been deferred, no new protected areas have been created to ensure long-term caribou habitat recovery. Our perspective is that

While Dave Hervieux is scientifically correct to observe that the wolf kills have temporarily kept caribou on the Little Smoky landscape, he knows that it has also allowed Alberta to continue to develop new all-season roads, grant new subsurface leases and generally do nothing to protect caribou habitat.

Despite some deferrals, logging proceeded in the name of mountain pine beetle control and against the original advice of the landscape planning team. AWA will not collaborate in such a charade. Caribou habitat is being lost at an alarmingly fast rate and the short-term success from shooting wolves reinforces government complacency about actually protecting caribou habitat from further industrial incursion. This is a recipe for failure of epic proportions.

Killing wolves takes everyone’s eye off the real problem.

- Cliff Wallis, 2nd Vice President, Alberta Wilderness Association

wolves have been scapegoated while industrial expansion, the root cause of caribou decline, is let off the hook.

Can Ottawa and Edmonton Learn from B.C.?

Some elements of British Columbia’s 2011 caribou plan show more promise than the current ambiguities of Alberta’s caribou policy. In 2010, B.C. deferred for at least five years new oil and gas tenures in 5,500 km² of three caribou population ranges. There are also constraints on forestry and gravel/sand mining leases in these same areas. The Ministry of Forests, Lands and Natural Resources will set performance measures to track the impacts of lease deferral. The B.C. plan is far from perfect overall, as it facilitates energy development in most caribou range areas by over-emphasizing industrial best practices already demonstrated to be ineffective as sole management tools. However, the lease deferral element shows foresight and should also be applied in Alberta.

Strong leadership on caribou protection should come from Ottawa. The federal government should uphold Canada’s *Species at Risk Act* provisions, but this has not happened to date. Public comments closed on the proposed federal caribou recovery strategy on February 22, 2012.

This proposal was four years overdue – imagine how much Alberta’s caribou herds shrank while Ottawa sat on its hands. Environment Canada received 14,000 submissions and the latest indications are that the final recovery strategy will be released in June 2012. The proposed strategy (covered in more depth in the October 2011 issue of *WLA*) categorized the seven Alberta herds most affected by habitat destruction to date as “non-essential” to the task of maintaining overall population connectivity. Continued destruction of up to 95 percent of their habitat would be allowed if provinces “provide a plan that will support stabilised local populations through the use of mortality and habitat management tools.” This means killing wolves at an unprecedented scale, as Environment Minister Peter Kent acknowledged in early September 2011 after the proposed strategy’s release. This is deeply unethical in the absence of any attempt to halt new habitat destruction or restore degraded habitat.

The draft strategy’s weakness is detailed in an important submission to Environment Canada authored by 11 scientists (Schmiegelow, Crichton, Hebblewhite et al.). Notably the authors are advisors to Environment Canada’s own Boreal Caribou Science Management



Caribou may be gone from Alberta's boreal forest in several decades if governments do not act soon to fulfill their legal responsibilities. Scientists emphasize that there is no evidence that the recovery of Alberta caribou populations is not biologically and technically feasible.

PHOTO: © P. SUTHERLAND

Committee. They state there is no scientific basis to support the “non-essential” categorization. To the contrary, they note that so-called “non-essential” West Side of Athabasca River, East Side of Athabasca River, and Cold Lake Alberta populations are actually connected to the “essential” Red Earth population. They add that the expected contraction in “non-essential” caribou habitat range due to weak recovery requirements means the strategy would likely not meet its stated objective to maintain caribou across the range of ecological conditions within their distribution in Canada. They firmly state “there is no evidence that recovery of local populations is not biologically and technically feasible.” After noting that a recovery strategy is to be based on scientifically-grounded assessments, separate from socio-economic considerations that occur later with the action plans, they point out that overlap of the “non-essential” population ranges with areas of high economic value suggests that socio-economic factors wrongly entered into this recovery strategy.

AWA’s own submission to Environment Canada on the strategy was skillfully prepared by EcoJustice, and included legal and ecological reasons why the strategy did not fulfill *Species at Risk Act* requirements. It was legal action by AWA, EcoJustice, the Pembina Institute and several Alberta First Nations that forced Environment Canada to release its long-overdue draft recovery strategy; AWA will continue to examine legal options for improved caribou management.

How Many Tomorrows Remain for Alberta’s Woodland Caribou?

Significant caribou habitat protection and restoration remains urgent. There are still important opportunities to achieve this. Sensible land disturbance limits have been twice proposed by multi-stakeholder groups with ample forestry and energy industry representation. In 2008, the Cumulative Environmental Management Association’s terrestrial ecosystem working group proposed that active oil sands leases be limited to less than 15 percent of the Regional Municipality of Wood Buffalo (which covers most of

northeastern Alberta). In 2011, the Lower Athabasca Regional Advisory Council recommended that less than 15 percent of a multi-use industry zone be disturbed at any one time by active bitumen leases. In each case, lobbying by a few companies seemed to veto these broadly-supported proposals. That this should be unacceptable is obvious to AWA given the overwhelming evidence of industrial responsibility for caribou population declines and the urgency to act.

There are still important opportunities to protect habitat by halting new leasing in caribou ranges. There are also still prime protection opportunities, for example in the non-bitumen areas of Cold Lake Air Weapons Range (and see Sean Nichols’ article describing an important study of how much Alberta caribou range can still be protected at very low natural resource value opportunity cost). If these opportunities are not taken very soon, nearly all of Alberta’s caribou will die out in our lifetime, an entirely predictable and preventable result of irresponsibly managed resource industry development. Surely this species deserves better. ▲