

ALBERTA'S SPECIES AT RISK: OVERVIEW AND PROGNOSIS

By Lindsey Wallis

braham Lincoln once said:
"public sentiment is everything.
With public sentiment nothing
can fail; without it nothing can succeed;
consequently he who moulds public
sentiment goes deeper than he who
enacts statutes and decisions."

Species at risk are a crucial part of environmental groups' efforts to rouse public support and create positive change for the environment. "It is a lot easier to get attention for an area if you have an icon, a flagship species to protect an area around. They become proxies for the work that we do to protect the wildland," Cliff Wallis, director of the Alberta Wilderness Association, says.

The grizzly bear, although not listed as *threatened* by the Alberta government, is an example of an iconic species and an ecosystem ambassador. The grizzly bear has been used by environmental groups to raise public awareness about environmental issues, partly through the Save the Grizzly campaign. "We are trying to sell a concept and we have to find the best ways of doing that," Wallis says. "A flagship species (like the grizzly bear) is used as a way of drawing attention to environmental concerns."

Cheryl Bradley, a southern Alberta biologist, agrees that species at risk are a useful tool to achieve biodiversity and conservation goals because people can identify with them. "They do help protect biodiversity, although public support may not be for all the right reasons...they may not understand the importance of the ecosystem but they can rally behind protecting grizzly bears or little burrowing owls or kit foxes. It's partly human nature that we can identify with other creatures and agree that they probably have a right to exist."

Bradley notes that species at risk can work against environmental groups in cases where the animal is not necessarily well liked or highly valued, such as snakes, spiders or some unattractive plants. Even the grizzly bear can pose



An 80 km stretch of the Milk River is home to Canada's only known resident population of Weidemeyer's admiral. Its crucial habitat is found in the woody vegetation along the banks of the river. PHOTO: C. WERSHLER

problems because some people feel bears harm cattle or feel personally threatened by grizzlies and therefore are unwilling to protect them.

Alberta's Endangered Species Conservation Committee recommended the grizzly for threatened status and most environmentalists agree that grizzly bear populations in Alberta are some of the most threatened in North America, with less than 500 remaining in the province today. According to Wallis the low number of bears spells trouble, not only for the species, but for the entire mountain ecosystem. "The grizzly bear is an umbrella species and represents the health of the ecosystem," he says. "These species at risk are like canaries in a coal mine - they indicate when land management strategies aren't working."

This is why AWA and other environmental groups are underlining the importance of habitat protection. "If you protect habitat for grizzly bears you protect habitat for a whole range of species. If the bears are in good shape it is likely that the ecosystem is in good shape," Wallis says.

Species at risk are protected under the federal Species at Risk Act (SARA), which also recognizes the importance of habitat protection. The three main objectives in the act are to identify species at risk, protect the species and its habitat, and develop recovery plans.

Under SARA, critical habitat for species at risk is identified as "the habitat that is necessary for the survival or recovery of a listed wildlife species, and is identified in a Recovery Strategy or Action Plan for that species."

Legislation is designed to protect both the animal and its habitat from harm. SARA prohibits the destruction of critical habitat once it has been identified in a recovery strategy. The problem, according to Wallis, is that though the deadlines for identification of critical habitat are one or two years after a species has been listed as at risk, in most cases the deadlines have been extended, leaving critical habitat unprotected.

Wallis says that, while it is only speculation, he thinks a lack of resources needed to identify critical habitat plays a role in these delays but politics is also involved; the government is concerned critical habitat designation will restrict development in those areas.

Fines up to \$1 million can be levied against individuals and companies who disregard the regulations. In 2006 fines of \$20,000 were levied against three individuals convicted of poaching abalone and just this year two B.C. photographers were fined \$6,000 for destroying the nesting site of a yellow-breasted chat. However, there have not yet been any fines for destruction of habitat under SARA.

The Alberta government has revised its species at risk strategy to "better manage and recover species at risk," according to public affairs officer Trisha Letilley. The strategy will focus more on putting recovery actions into effect and will work in conjunction with the new Land-Use Framework to better protect species and habitat. "The Land-Use Framework will set up regional plans and legislation will bind regions to those plans," Letilley said.

More details on the legislation are set to come out by the end of March. Cheryl Bradley is optimistic that the legislation will have "teeth," but is concerned because opposition to the Land-Use Framework seems to be coming, not from industry, but from inside the government.

Some caution may be in order, however, since the Land-Use Framework website states that "existing contractual commitments will be honoured. However, planning decisions on future development will need to be aligned with provincial policies and directions."

Currently Alberta has no overriding regional plan that dictates what can and cannot be done in an area but the government has been down this road before with the Integrated Resource Plans of the '80s. According to Wallis, they failed because they were focused on resource development and most critical habitat was not included in any prime protection zones where no development occurred.

Bradley hopes the Land-Use Framework will change the way land use decisions are made and eliminate "the tyranny of small decisions" that are made in isolation. "What we need is to look



The cat-sized swift fox has been successfully reintroduced into southeastern Alberta. The goodwill and cooperation of ranchers is crucial to the species' long-term prospects. PHOTO: C. WALLIS

at all the land uses on a land base and cumulatively what are their effects on the landscape...We're not clear at this point how (the Land-Use Framework) will roll out, but just talking this way we're moving in the right direction," she said.

The first two regions the framework will address are the Lower Athabasca and the South Saskatchewan; the advisory committees will consist of representatives from a wide range of interests. Wallis says he is worried because nongovernmental organizations were not included in the Lower Athabasca advisory committee and that these plans won't result in action, leaving a lack of enforceable mechanisms to protect habitat.

"There are a lot of stop gap measures in place but habitat is still being fragmented and lost," Wallis says. "There is a lot on paper but very little being done on the ground."

Measures the government is already taking include reducing industrial activity in critical habitat by using setbacks and seasonal access restrictions for critical winter or breeding habitat but Wallis says the overall development in sensitive areas is not being reduced. In fact, there are new threats posed by new developments in existing protected areas like the Suffield National Wildlife Area, where EnCana has proposed to drill more than 1,000 wells.

The need for better habitat protection in Alberta is most evident in Grassland ecosystems, where there is a disproportionate number of species at risk. According to Wallis, this is because less than 1% of Alberta's Grasslands are protected, compared to the Rocky Mountain ecoregion where over 60% is

protected. The Foothills are also in dire straits with less than 2% protected.

Bradley emphasizes the need for protection of large tracts of landscape. If the landscape is not protected the diversity of life that depends upon it will be lost. "By dealing with habitat on a large scale you're more likely to assure the protection of species, rather than trying to protect biodiversity with postage stamp areas," she says.

Wallis says the need to protect habitat to effectively protect species is best illustrated by the plight of the caribou. There were 15 years of mitigation efforts including timing restrictions, greater spacing between oil and gas wells, and fewer all weather roads but caribou numbers still plummeted. This is because companies did not stop chopping down the forest and did not stop drilling wells or building roads and effectively industrializing the landscape.

"Delays in protecting critical habitat are often caused by industry and government saying that they need better science," Wallis says. He counters that to do good science we require control areas to test how land use decisions affect habitat and the species that depend on it. Without large tracts of protected habitat there are no control areas. "You can't talk about a square mile or two. For species like caribou and grizzly bear you need thousands of square kilometres," he says.

With the exception of Wood Buffalo National Park, most protected areas outside of the mountains are typically small, says Wallis. They are nowhere near the size, nor do they have the connectivity, that has been recommended by scientists. Furthermore, they fail to meet the minimal targets of the Alberta

government in their Special Places 2000 program. In these under-protected areas, including the Foothills, Parkland, Boreal Forest and Grassland, Wallis says that all manner of industrial activity needs to be halted in critical habitat for species at risk.

"You don't know how bad it is until it is too late. There is a lag effect," Wallis says.

Three hundred eighty species are listed as *at risk* or *sensitive* by the Status of Alberta Wildlife 2005. The high number of *sensitive* and *at risk* species concerns environmentalists because, as Wallis says, "it will get worse before it gets better because it takes so long for ecosystems to recover." He points to the 50-80 years it will take for the ecosystem in the Little Smoky area to recover enough so caribou can become self-sustaining again.

"It is a lot cheaper and a lot more

effective to protect these areas in the first place than to get into inefficient and costly recovery operations," Wallis says.

"The public assumes that governments will protect species and ecosystems but people need to speak up and let their elected representatives and other people know that this is an issue of concern," Wallis says. "The environment doesn't affect people immediately. It is a very slow loss that is almost imperceptible. Obviously not enough people are phoning or writing to voice their concerns."

According to Wallis strategies for protecting at-risk species should include creating large protected areas, monitoring species status (including expanded research programs) and intervening (including land-use stipulations).

"Most of the emphasis has been on intervention programs and to a lesser extent research and monitoring — some

species like caribou are well researched but many species are not. However, large protected areas are missing in any recent government efforts related to species at risk," he says.

Wallis points again to areas like the Grasslands and Parkland, home to the majority of Alberta's species at risk, which have no large protected areas without industrial activity or motorized access. "We need a comprehensive look at how we are managing the whole landscape if we want to recover our declining species. The Land-Use Framework may be our last shot at this."

Bradley says she wants Alberta to give habitat protection the same weight as economic or social objectives and for all Albertans to work together for that objective. "Whether we get at it through the recovery plans and critical habitat designations or through regional land-use plans we need to get the habitat protected

Alberta's Endangered/Threatened/Special Concern Species (flora excepted) as identified in the Federal Species at Risk Act

as identified in the Federal Species at Risk Act

MAMMALS

- Swift fox
- Ord's kangaroo rat

ENDANGERED

THREATENED

- Wood bisonWoodland caribou
 - (Boreal and Southern Mtn populations)

BIRDS

- Whooping crane
- Eskimo curlew
- Burrowing owl
- Piping plover (circumcinctus subspecies)
- Mountain plover
- Greater sage-grouse
- Sage thrasher

- Peregrine falcon (anatum subspecies)
- Sprague's pipit
- Loggerhead shrike (excubitorides subspecies)
- Long-billed curlew

SPECIAL CONCERN

- McCown's longspur
- Yellow rail

REPTILES AND AMPHIBIANS

- Eastern yellow-bellied racer*
- Northern leopard frog
- Great Plains toad
- Western toad

FISHES

- Western silvery minnow
- "Eastslope" sculpin
- (St. Mary and Milk River populations)

ARTHROPODS

- Gold-edged gem
- Half-moon hairstreak
- Five-spotted bogus yucca Moth
- Non-pollinating yucca moth

*Alberta is not recognized as a home for the eastern yellow-bellied racer

- Yucca moth

MOLLUSCS

- Banff Springs snail

- Monarch
- Weidemeyer's admiral

⁻ Daini Springs shan

in law," Bradley says.

Alberta Wilderness Association is dedicated to protecting species at risk by protecting the habitat needed to survive and thrive. Public awareness campaigns and litigation are among the methods the AWA uses to pursue this goal.

AWA has used individual species to champion the protection of endangered ecosystems. Two examples of this approach are the greater sage-grouse (Grasslands) and grizzly bear (Rocky Mountain/Foothills).

By taking the federal government to court over critical habitat designation for sage grouse more attention is being devoted to the protection of this bird and its habitat because of the publicity and subsequent public outcry during the litigation. Wallis says government is dragging its heels because critical habitat may place further restrictions on development in those areas.

Wallis says environmental groups

have been patient but the government is way behind in meeting the legal requirements for designation of critical habitat under SARA. "At some point governments must do the right thing — we shouldn't always have to take them to court."

For the grizzly bear, AWA has launched a number of public awareness campaigns, most notably Save the Grizzly, which includes magazine ads, billboards and a website.

AWA staff also serve on various government and industry committees on species protection. "The legal requirements surrounding species at risk have been instrumental in bringing industry and government to the table to discuss habitat," Wallis says.

While SARA is helpful, Wallis stresses that without provincial species at risk legislation we can't address all the concerns about declining species and habitat destruction. "The polls are telling

us that the environment is a high priority, even in these bad economic times, but the public has to communicate that to their elected representatives. If we don't we will continue to lose species," he says.

Cheryl Bradley says, "We've got a great opportunity here to try to develop a society that is gracious enough to allow other species to co-exist with us. We still have the option here to maintain our full suite of biodiversity. In the long-term that's beneficial.

"If you just plan for today and don't consider what your actions are going to do tomorrow you might end up where you don't want to be."

Lindsey Wallis has just graduated from the post-graduate journalism program at Mount Royal College and will be interning at Calgary's Fast Forward Weekly. She loves the outdoors and keeps herself grounded by spending weekends hiking or cross-country skiing.