



## THE LAST WALTZ FOR A PRAIRIE ICON?: THE GREATER SAGE-GROUSE

By Ian Urquhart

The video is stunning. As many as five greater sage-grouse strut across the prairie in their annual courtship ritual. Words cannot do justice to the magnificence of the visual display I watch, nor to the audio display I hear. Dual, dark, featherless, skin patches – symmetrical expansions of the male's esophageal air sac – literally explode through the grouse's white chest feathers to dramatic auditory and visual effect. This theatre is staged on a lek, a traditional courting site used year after year by the males in their efforts to breed with females. While Steve Schwartz's video was shot in northeast Montana in April 2008 ([www.youtube.com/watch?v=TX6mCLM3IPw&NR=1](http://www.youtube.com/watch?v=TX6mCLM3IPw&NR=1)) it might have just as easily been shot in the Dry Mixedgrass natural subregion in Alberta's southeasternmost corner, south of Medicine Hat.

Or, could it? Since 1998 the sage-grouse has been classified as an endangered species by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). This classification and status just was reaffirmed by COSEWIC in the same month as Schwartz made his video; the greater sage-grouse's SARA (Species at Risk Act) status is *endangered*. This once prolific prairie icon is one Alberta shares with Saskatchewan. When the carts of European settlers first rolled across the grasslands there may have been as many as ten million sage-grouse in North America. In 2008 there were less than a thousand birds of breeding age in the total Canadian population and half as many leks as in the late 1990s. Since 1988 this population has plummeted by 88 percent, 42 percent in the last decade – a collapse COSEWIC rather conservatively labels “significant population declines.”

The Species at Risk Public Registry ([www.sararegistry.gc.ca](http://www.sararegistry.gc.ca)) estimates that the Alberta sage-grouse population in the late 1960s was anywhere between 3,000



*The spectacular breeding displays of the sage-grouse are culturally important to Prairie First Nations. Some dances and costumes imitated the male strutting displays.* PHOTO: © W. LYNCH

and 6,000 individuals. Survey data from 2001 identified just 108 males at only eight leks; the total estimated population in Alberta in 2001 was roughly 480 birds. Not surprisingly, both adult and chick survival rates were low. In 2008 only 78 males were reported to have returned to Alberta's remaining leks, 13% below the numbers recorded in 2007.

Explaining the precipitous decline of the sage-grouse, as would seem to be the case for so many of Alberta's species at risk, is inextricably linked to habitat loss and degradation. “Causes for the decline,” according to COSEWIC, “are largely due to the loss, fragmentation and degradation of its native grassland habitats through oil and gas exploration, overgrazing and conversion to crops.” By eliminating millions of hectares of sagebrush habit over the years we have produced a grouse population in danger of extirpation – a fate already suffered by the British Columbia population. Unfortunately, the provincial

government seems unprepared to stress the importance of habitat integrity to the grouse's future. The *Alberta Greater Sage-Grouse Recovery Plan 2005-2010* states: “The exact causes for the decline in sage-grouse numbers are not known.”

The conclusion that our population of sage-grouse is headed for extirpation may be too pessimistic, at least according to the 2008 sage-grouse recovery strategy prepared by Parks Canada on behalf of the federal Minister of the Environment. The strategy regarded recovery of the population as feasible for several reasons. The population was stable, albeit at low levels, with sufficient birds of breeding age and active leks to boost the population; net population increases could also be pursued by taking advantage of the remaining good habitat and improving poorer habitat; altered land-use practices could perhaps reduce, even eliminate, threats to the grouse and its crucial habitat.

Developing an effective action plan for sage-grouse recovery also was regarded as important for the positive effects it would have on other species at risk in Alberta's Grasslands natural region. Protecting sagebrush habitats also was predicted to benefit two other endangered species, the burrowing owl and the sage thrasher, two threatened species, the loggerhead shrike and the Mormon metalmark, and a special concern species, the long-billed curlew.

Recent work by Cameron Aldridge and Mark Boyce on the habitat needed to help sage-grouse persist suggests that major changes in Alberta's approach to land use buffers around active leks would be needed in order to assist the grouse. The authors focus their attention largely on identifying high-quality nesting and brood-rearing habitats in an 1100 square kilometre study area in southeastern Alberta. Their modeling and mapping work suggests that much larger buffer areas need to be established around active leks if high-quality sage-grouse nesting and brood-rearing

habitats are to be protected. Alberta's 3.2 kilometre protection buffer "guideline" around lek sites, although greater than the old 1 kilometre guideline, is still questioned by their research. This buffer approach to protection "could easily result in important habitats being left unprotected...."

From the work of biologists such as Aldridge and Boyce it seems quite certain that the future of the sage-grouse depends importantly on the maintenance of intact "source habitats" – habitats that pose a minimal risk of failure to the species. Yet, on this point, the federal government ultimately has delivered no more than the provincial government. "Critical habitat," the federal recovery strategy claimed, "cannot be identified for the Sage-Grouse at this time."

The federal refusal to identify critical sage-grouse habitat in its 2008 recovery strategy is a familiar refrain in the politics of protecting endangered species in Canada. According to Ecojustice (formerly the Sierra Legal Defence Fund) of the 55 final recovery strategies posted on the SARA public registry in early 2008, only 17 of those strategies identified any critical habitat at all. This situation exists despite the fact that the SARA requires recovery strategies to identify the habitat needed for endangered species to survive or recover "to the extent possible, based on the best available information."

This refusal was the final insult for AWA and other conservation organizations. In February 2008 AWA joined Federation of Alberta Naturalists, Grasslands Naturalists, Nature Saskatchewan, the Wilderness Committee, and Ecojustice in a lawsuit filed in the Federal Court of Canada; the claim there is that the federal Minister of Environment failed to carry out his duties under SARA to identify critical sage-grouse habitat. As Professor Boyce succinctly put it: "Protecting habitat is the most important thing we can do to help the recovery of species at risk and for the sage-grouse this needs to be done now. Unfortunately, as with other endangered species, Environment Canada has chosen not to identify critical habitat in the sage-grouse strategy, despite having ample scientific information to do so."

For someone who is only recently acquainted with the sage-grouse issue this situation is maddening for two reasons.



*The burrowing owl is an endangered species that also would benefit from protecting and restoring the sagebrush habitat critical to sage-grouse health. PHOTO: C. WALLIS*

The first reason concerns the treatment of the sage-grouse by government in the United States. On the one hand, south of the border the debate continues over whether or not the sage-grouse should be listed under the Endangered Species Act. A final decision on that question, originally anticipated for this May, now is expected even later in 2009, pending the consideration of new information regarding the species and its habitat. Yet, despite this uncertainty, American regulators actually show signs of managing the landscape as if the future of the sage-grouse mattered. A month ago, for example, the Interior Board of Land Appeals remanded 82 coalbed methane well permits in Wyoming's Powder River Basin back to the Bureau of Land Management (BLM). Why? Because the board declared there were inadequate and inconsistent protections for sage-grouse. It is refreshing to see energy regulators actually being required to consider seriously the effects petroleum exploitation have on species unable to lobby Congress or state legislatures. Is it too much to hope for that Alberta's

regulators will follow this lead?

The second maddening feature of the sage-grouse issue is the elevated public profile I think grouse protection enjoys in the United States compared to Western Canada. In researching this article it was quite easy to find stories documenting the travails of sage-grouse in the Western United States. Turning to Alberta, it was as hard to find media coverage of this "officially listed" endangered species as it is to find an active lek in southeastern Alberta. According to the databases I consulted no newspaper, no print media of any type, gave any coverage to February's launch of the sage-grouse habitat lawsuit against the federal government. Such silence is stunning, arguably irresponsible. It serves to underline a point made in Nigel Douglas' article on grizzlies – the public needs to speak out – make that shout out – about the importance of such an endangered species. If we do not act in the very near future we may soon visit YouTube to watch the last waltz of a prairie icon. 🦉