

Species at Risk

Emergency Protection Orders and Non-Targeted Species

By Ian Urquhart



Those interested in species at risk likely are familiar with the term “umbrella” species.

An umbrella species, according to the *Oxford Dictionary of Environment and Conservation*, is: “(a) species of plant or animal that has a large home range and broad habitat requirements, both of which overlap with other species, so that if it is given a large enough area for its own protection the other species will also benefit.” I have seen the phrase used in the context of grizzly bear conservation. Here I am interested in two questions: May endangered greater sage-grouse on our prairie landscapes be viewed as an umbrella species? If so, will efforts to protect and restore greater sage-grouse and sage-grouse habitat, such as the federal emergency protection order, benefit other species that depend on sagebrush habitat?

Sage-Grouse Conservation and Sagebrush Songbirds in the American West

I was reminded to think about the links between an umbrella species and other species by a study released last October. This study, *Sagebrush Songbirds Under the Sage Grouse Umbrella*, was sponsored by the U.S. Sage Grouse Initiative. This initiative is an ambitious collaborative effort by many actors to strengthen the presence of sage-grouse across the American West (for information about the Initiative see the October 2014 issue of WLA available through our archive at <https://albertawilderness.ca/publications/wild-lands-advocate/>).

The songbird report studied three sage-

brush songbirds: Brewer’s sparrow (*Spizella breweri*), sagebrush sparrow (*Artemisiospiza nevadensis*), and sage thrasher (*Oreoscoptes montanus*). Patrick Donnelly and Jason Tack, the research scientists who conducted the study, wanted to know, first, if songbird abundance was correlated positively with sage-grouse abundance. Second, they explored if sage-grouse conservation measures benefited these three songbirds.

On the mutual abundance issue Don-

nelly and Tack found that strongholds for sage-grouse coincided with those for sagebrush songbirds. This was confirmed in two ways. Songbird abundance doubled when sagebrush habitat comprised more than 40 percent of the landscape. These three species of songbirds also were found to be between 13 and 19 percent more abundant near large sage-grouse leks. Both of these measurements also showed the value of measures targeted to protect



Sage Thrasher PHOTO: © R. WERSHLER

and restore sage-grouse populations for these three species.

What Will the Federal Emergency Protection Order Mean for Species Other Than Sage-Grouse?

I put this question to Environment Canada. I was particularly interested in the impact on the sage thrasher. I picked the sage thrasher because the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) recommended the sage thrasher be classified as endangered. This designation was assigned to the songbird in 1992 and it was reaffirmed in 2000.

The Environment Canada officials, Megan Harrison and Dr. Stephen Davis, promptly and helpfully answered my question. Dr. Davis is supervising a student who is exploring that question in

the sage-grouse's Saskatchewan range. He expects the federal EPO will improve the prospects of the sage thrasher in Alberta and Saskatchewan but that improvement will be limited by the fact that Saskatchewan and Alberta are at the very northern edge of their range. Individuals may benefit but Dr. Davis suspects the population likely would be unaffected.

That said, other species that do well in a sagebrush habitat should be expected to benefit from the EPO. Brewer's sparrow, clay-colored sparrow, vesper sparrow, lark bunting, and loggerhead shrike should benefit from the critical habitat conservation measures implemented in Alberta and Saskatchewan.

Dr. Davis added that improved sagebrush habitat is likely to be neutral to negative for other grassland bird species. Sprague's pipit, Baird's sparrow, chestnut-collared

longspur, and McCown's longspur are unlikely to gain much advantage if sagebrush densities increase on prairie grasslands.

On balance I think there are strong grounds for believing that the umbrella of protection afforded greater sage-grouse through the federal EPO will improve the health and diversity of songbird populations on the public lands it applies to. I look forward to seeing the results of Dr. Davis's student and hope they confirm this belief.

If you're unfamiliar with the beautiful sounds these songbirds bring to our grasslands I would invite you to visit an online site such as Cornell University's Lab of Ornithology (<https://www.allaboutbirds.org/>). There, in addition to hearing the songs of these birds, you can acquaint yourself with many more facts about these species, their ranges, and their life histories. ▲



Greater Sage-Grouse PHOTO: © C. OLSON