



COLUMN: DUE WEST BY DAN WHIPPLE

Grouching About Sagebrush

By Dan Whipple, 2-16-07

Among those of us who have been hurled from our horse or our car unprotected through a sagebrush landscape, it's hard to arouse any tender feelings toward this humble plant. Despite its inviting gray-green coloration and its soft appearance in the dusky evening panorama, *Artemisia* does not provide a gentle cushion for folks loosed inconveniently from their conveyance. Sagebrush has all the gentle forgiveness of the Bush Iraq policy. Under the circumstances described, there seems to be too much sagebrush by half.

Plus, the damned stuff seems to be everywhere. So it comes as a surprise to discover, "Sagebrush is one of the most severely threatened bird habitats in the United States," according to a new report by the American Bird Conservancy.

So while personally we can take sagebrush or leave it alone, we are very fond of birds, considering them to be the dinosaurs our parents would never let us have when we were kids.

Of the 485 species of animals that have become certifiably extinct since 1600, 116 of them—nearly 25 percent—are birds. Of the 9,500 or so species listed as threatened by the World Conservation Union's Red List in 2000, more than 2,100—about 22 percent—are birds.

Except for certain kinds of plants, bird species are showing the worst survival record in the natural world. This observation carries some caveats, however. The disaster rate may look higher because we know more about birds than we do about lots of other animals. People have been fascinated by birds for millennia and have tracked their biology closely. Today, birdwatchers are among the most avid and dedicated of conservationists, and among the best informed. This weekend, in fact (Feb. 16-19) is the great backyard bird count. Last year, 60,000 checklists were submitted covering 7.5 million birds and 623 different species.

In any case, sagebrush is not specifically in danger of extinction, though some of the bird species inhabiting it are under considerable pressure, especially the greater sage grouse, the Gunnison sage grouse and Brewer's sparrow. Sagebrush covers 155 million acres of the West from New Mexico to Washington and the Rockies to the Sierra Nevada.

Steven Knick, an ecologist with the U.S. Geological Survey's Forest and rangeland Ecosystem Science Center in Boise, Idaho, says, "That ubiquity is a little misleading." Knick says that sagebrush ecosystems are being degraded in large part because of a changed fire regime.

Sagebrush doesn't do well in fires. This hasn't been a problem in the past because the sparse grasses in a natural sage landscape, like bunchgrass, don't carry the fires well. The fact that sagebrush dominates so much of the landscape indicates that wildfires have been relatively rare.

Now, however, Knick says that nonnative invasive grasses like cheatgrass have changed this dynamic. Cheatgrass is a higher density vegetation, like a crop field or a lawn, where each blade touches the next blade. Cheatgrass matures early in the season and dries out quickly, providing a network of straw to promote fires. Fires are carried easier and burn hotter. This is a new phenomenon in these sagebrush prairies.

The greater sage grouse was first described by Lewis and Clark. Meriwether Lewis spotted some on August 12, 1805, near Lemhi Pass on the Idaho-Montana border: "we also saw several of the heath cock with a long pointed tail and an uniform dark brown colour but could not kill one of them. they are much larger than the common dunghill fowls, and in their [h]abits and manner of flying resemble the grouse or prairie hen."

According to U.S. Fish and Wildlife Service, there were about 1.1 million birds in 1805. In 1998, a range census found about 157,000. More recent surveys estimate anywhere from 100,000 to 500,000. The population of greater sage grouse declined an average of 3.5 percent a year between 1965 and 1985, a rate that has slowed somewhat since then, though the bird is still losing ground.

The Fish and Wildlife Service, after conducting a status review found that "the species does not warrant protection under the Endangered Species Act at this time."

According to a June 2004 "Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats" by the Western Association of Fish and Wildlife Agencies, "Three fundamental characteristics of the landscape that early European explorers once described as a vast sea of sagebrush have been altered from pre-settlement conditions." The total sagebrush land area has been reduced; the native perennials have been replaced by invasives; and the configuration of sagebrush habitats has been changed.

On top of all this, the sagebrush prairie faces another threat. Knick says that energy development is carving up the habitat. Well pads, roads, fences and pipelines carve up the country as well as providing new perches for raptors who may not have been present before. Noise from compressor stations can also disrupt breeding.

Sage grouse are only one of 350 species of plants and animals that depend on sagebrush habitat that is deteriorating. The American Bird Conservancy Report says, "Populations of all the key birds are in decline, and although some of them still exist in fairly large numbers, their prognosis is grim. This is why sagebrush ranks so highly in our top ten threatened habitats"—it is the third most imperiled—"there is no system as vast as this one is such free fall."