Northwest Wildlife Icons Still at Risk

Cascadia Scorecard update finds uneven progress

Sightline INSTITUTE

SUMMARY

They're Northwest icons. Their habitats span the Pacific Northwest, from coastal waters to mountain streams, from forest to desert. And they're in trouble, with current populations that are just a fraction of their historic abundance.

Yet the five species that make up Sightline Institute's wildlife index—salmon, orcas, wolves, caribou, and sage-grouse—are showing some uneven yet encouraging signs of improvements.

Sightline's wildlife index is part of the organization's Cascadia Scorecard, a sustainability report card for the Pacific Northwest that also tracks human health, energy consumption, and other key environmental and social trends. By the Scorecard's reckoning, gains in 2009 for orcas, salmon, and wolves offset a modest decline in caribou numbers, pushing the wildlife index average to its best performance since 1980.

But despite these promising results, troubling signs remain for these species and the ecosystems on which they depend. Populations of Oregon's greater sage-grouse plummeted in 2008[1], and the bird's plight attracted national attention when the US Fish and Wildlife Service decided not to list it as endangered, despite its precipitous decline.

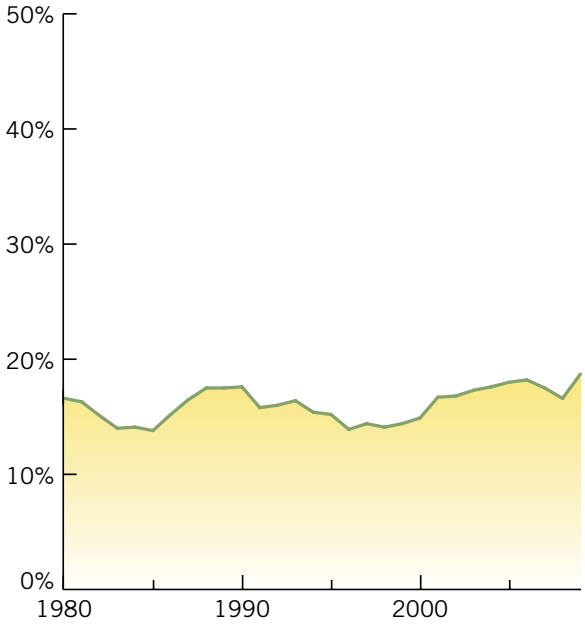
Like sage-grouse, salmon runs vary widely from year to year. Still, salmon populations remain at just a fraction of their historic levels. Today, wild spring and summer Chinook salmon return to the Lower Columbia at only 3 percent of their historical abundance—a sign of severe ecological stress. And because orcas depend on Northwest salmon runs for food, declines in salmon populations could spell trouble for both species.

Rocky Mountain wolf populations have been increasing for years, but growth slowed in 2009 when Montana and Idaho opened recreational hunts for the animals. And as wolves in Canada and the US continue to return to their historic habitat, they could come into conflict with the sole caribou population that mainains a toe-hold south of the 49th parallel.

Sightline's wildlife indicator focuses on these five species in order to give us a glimpse into the state of our natural heritage. When ecosystems are healthy—and when we care for them responsibly—these species can thrive. When ecosystems are under stress, the Northwest's iconic wildlife suffer.

How Do Northwest Species Fare?

(avg. share of historical abundance of salmon, orcas, wolves, caribou, and sage-grouse)



SALMON

Each year, the chinook (or "king") salmon journey up the Columbia River, past dams, deserts, cities, and farms, to spawn in their natal streams. In 2009, more than 300,000 chinook passed the Columbia River's Bonneville Dam during spring and summer, a 29 percent increase over the previous year—and the second consecutive year of increasing numbers.

Yet annual population fluctuations send murky messages about the health of the fish. Because of natural population dynamics, these chinook counts vary by about 40 percent a year on average. Only long-term monitoring can reveal meaningful trends in the population. And last year's fish count, while good by the standards of the past 25 years, is still a very poor showing in historical terms: less than 11 percent of historical abundance. The true story is even bleaker: many of the returning salmon are hatchery-raised fish. Wild salmon probably return at less than 3 percent of their former numbers.

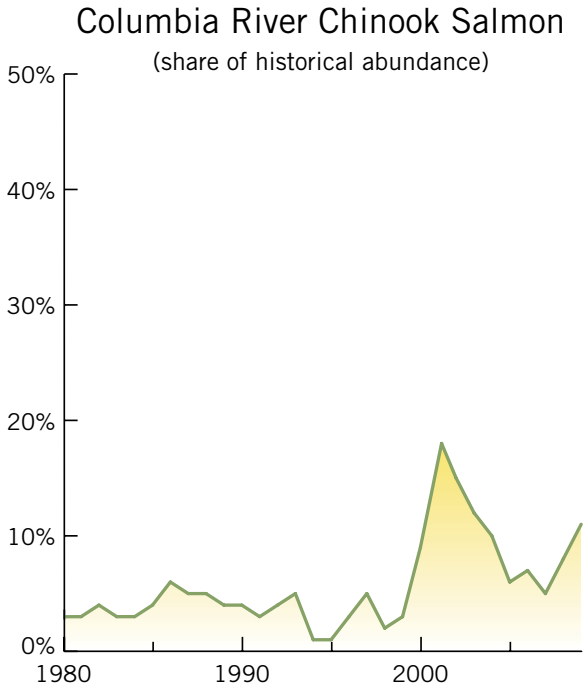
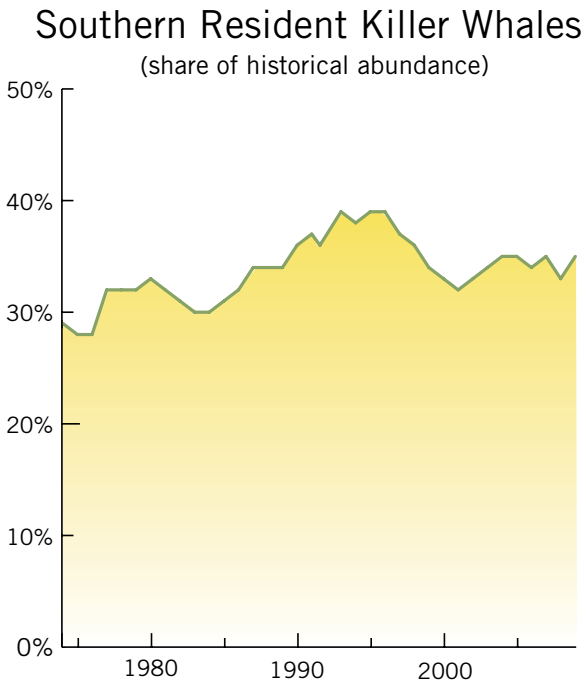


Figure depicts numbers for spring and summer chinook salmon in the lower Columbia River.

ORCAS

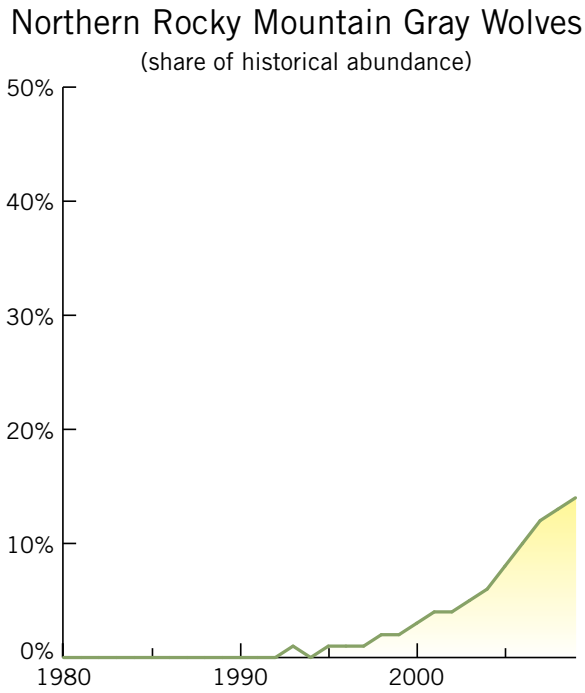
The "southern resident" orcas live much of their lives in the inland marine waters of Puget Sound and the Georgia Strait. After a worrisome decline during the first years of this century, the number of southern resident orcas had been increasing in the last few years.

In 2009, the whales experienced a baby boom, adding five new orcas. This was welcome news after a decline of five orcas in the previous year. Many orca experts say that an abundance—or shortage—of salmon is the biggest factor determining what happens to the southern residents, highlighting the important connections between two of the Northwest's iconic species.



WOLVES

The most promising trend in the wildlife indicator is the rapid increase of Rocky Mountain wolves, though population growth slowed in 2009 due to new recreational hunts in Montana and Idaho and increased conflicts with domesticated animals. Wolf numbers are still at less than 15% of their levels prior to European contact.

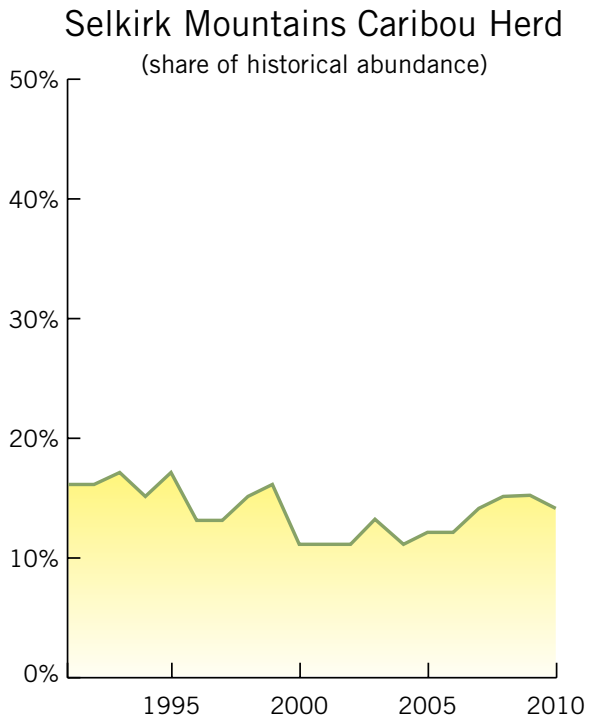


Wolves had been systematically eradicated from the western United States by the middle of the twentieth century. But in the mid-1990s, federal officials reintroduced a few dozen gray wolves to the wilderness of central Idaho and to Yellowstone National Park. Since then the wolves have flourished, expanding their range and number faster than even the most optimistic projections. At the end of 2009, biologists estimated that there were more than 1,386 wolves in Idaho, Montana, Washington and Oregon.

Today, pioneer wolves originating from both Idaho and British Columbia are returning to their historic range in Oregon and Washington. In 2009, federal biologists counted 14 wolves in Oregon and 5 in Washington, though it remains to be seen how quickly they will repopulate those states.

CARIBOU

Mountain caribou—the most endangered large mammal in North America—are in grave danger of extirpation south of the Canadian border. In the remote Selkirk Mountains of northeast Washington, northern Idaho, and southern British Columbia, one caribou herd persists; the Scorecard includes their precarious numbers as a proxy for the populations of mountain caribou across the northern regions.



In 2010, biologists counted only 43 animals in the Selkirk caribou herd, 3 fewer than the previous two years. But it's not clear whether this represents a one-year decline or a more serious problem for the tiny population.

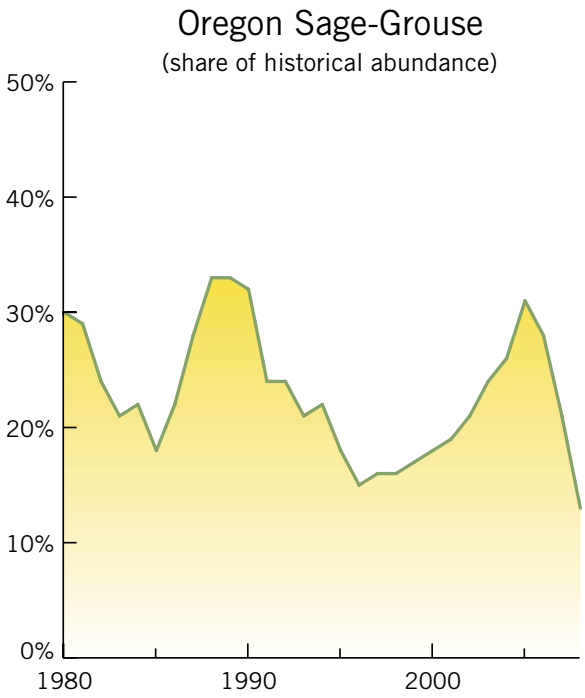
The caribou are threatened on several sides: clear-cut logging has reduced old growth trees that host lichen on which caribou depend for food; people, especially those on snowmobiles, startle the animals

in winter and cause them to expend scarce calories to flee through deep snow; and predators such as cougars traverse the hardened snowmobile tracks into the herd's winter range—travel that the predators might not otherwise manage.

SAGE-GROUSE

The greater sage-grouse, a desert-dwelling bird known for its astonishing breeding displays, is one of the best indicators of the health of the Northwest's interior sage deserts. Much of the Northwest's sagebrush landscapes have been degraded by ranching, fencing, invasive species, mining, and off-road vehicles.

Oregon retains the largest sage-grouse population of any part of the Northwest. In recent years, however, Oregon's sage-grouse have suffered worrisome declines. Today, biologists estimate that only about 22,000 of the birds remain in Oregon—less than 15 percent of the species' historical abundance in that state.



About Sightline

Sightline Institute is a not-for-profit research and communication center—a think tank—based in Seattle. Founded in 1993 by Alan Durning, Sightline's mission is to make the Northwest a global model of sustainability—strong communities, a green economy, and a healthy environment.

Contributing staff authors are Jennifer Langston, Eric de Place, Lisa Stiffler and Clark Williams-Derry.

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1. Sage grouse data for 2009 will be available later this year, and may show whether 2008's plunge was a harbinger of severe danger for the species, or merely the result of natural population variations.