

# Scientists Probe Beak Trouble in Alaskan and Northwestern Birds

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Nov. 10, 11:55 p.m. | Updated

Federal biologists are intensifying research on a large and unexplained rise in the frequency of deformed beaks in a wide range of bird species from Alaska through the Pacific Northwest, including British Columbia. The deformities reduce the birds' ability to feed, clean themselves and raise young, according to the scientists, from the United States Geological Survey. [Nov. 9, 8:46 a.m. | Updated I've posted [an interview with two of the biologists.](#)]

The photo below, by Sandy Talbot, shows a normal black-capped chickadee and one with a deformed beak:



The [rise in the frequency of the deformities](#) in the region over the last decade is “startling” and cannot be a statistical fluke, [the researchers said in a news release](#) on Monday.

The biologists have summarized what's known, and not known, in two papers in [The Auk, a Quarterly Journal of Ornithology](#). There's much more in the latter category at this point. One of many puzzling findings is that the high rate of deformities is largely confined to adult birds, not juveniles. Here are links to the papers:

“[Epizootic of beak deformities among wild birds in Alaska: An emerging disease in North America?](#)” and “[Beak deformities in Northwestern Crows: Evidence of a multispecies epizootic.](#)”

The authors say they have found hints, although no firm evidence, that environmental contaminants are involved. The geological survey's Alaska Science Center has set up [an excellent Web site](#) describing the unfolding phenomenon.

Here's the team's summary of possible causes:

Although we do not yet know what is responsible for the beak deformities observed in Alaska and the Pacific Northwest, there are several possible causes to consider. In general, beak deformities may be influenced by [contaminants](#), [nutritional deficiencies](#), [disease](#), [parasites](#), blunt trauma, or [genetic abnormalities](#).

We have investigated contaminants, disease, and parasites and also examined genetic components to determine if deformities are heritable or result from genetic abnormalities. We have some evidence for environmental contaminants as a possible causative factor, but more research is needed. Possible nutritional deficiencies and imbalances also deserve further study.

There are unnerving echoes of the [Chytrid fungus](#) that has swept through a wide range of amphibians, the [fungus killing off bat colonies](#) in the Northeast and the colony collapse disorder in honeybees.

The Web site includes [a form for reporting sightings](#) of beak deformities.

The most studied species showing high rates of deformities are the [northwestern crow](#) and [black-capped chickadee](#), but the survey Web site has an extraordinary [photo gallery of beak deformities](#) in species ranging from white pelicans to Steller's jays\* and American kestrels.

I'm sending questions to the authors of the papers and some ornithologists and will provide an update the post when I get more information.

Here's a 2008 [article on the beak mystery](#) by Robert McClure, then of the Seattle Post-Intelligencer.

[\*The post has been updated to correct the name of the affected jay species. It is the Steller's jay, not stellar. Apologies, bird lovers!]