

# Arctic oil: A boon for nest predators

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Ravens are one of several predator species attracted to oil drilling infrastructure, a new study finds. Credit: Steven Zack/Wildlife Conservation Society

A new study by the Wildlife Conservation Society, U.S. Fish and Wildlife Service, and other groups reveals how oil development in the Arctic is impacting some bird populations by providing "subsidized housing" to predators, which nest and den around drilling infrastructure and supplement their diets with garbage - and nesting birds.

Oil development has attracted populations of opportunistic predators including Arctic fox, ravens, and gulls, which feed on nesting birds. The predators use oil infrastructure, which ranges from drilling platforms to road culverts, to build their nests or dens. In this study researchers found one bird species, the Lapland longspur, lost significantly more nests in areas closer to oil development than farther away. Nests beyond 5 kilometers (3.11 miles) from oil development remained unaffected by

predators.

Other birds, including red and red-necked phalaropes, may also be feeling impacts from predators, though data was less strong than with longspurs. At the same time, other species tested did not show an effect. Authors believe this may be due to high natural variation in nesting success across years and between sites.

The study appears in the September issue of the journal *Ecological Applications*.

Authors of the study monitored nearly 2,000 nests of 17 passerine and shorebird species over a four-year period. Birds from five continents migrate to the Arctic each year to nest.

"This is the first study specifically designed to evaluate the so-called oil 'footprint' effect in the Arctic on nesting birds," said the study's lead author, Joe Liebezeit of the Wildlife Conservation Society. "The study was also unique in that it was a collaborative effort among conservation groups, industry, and federal scientists."

The impetus for this study stemmed from previous evidence suggesting predators have increased in the oil fields near Prudhoe Bay.

"The findings of this study shed new light on growing concerns about oil development impacts to wildlife in the Alaskan Arctic, an immense region that, outside of Prudhoe Bay, is still largely undisturbed by humans and home to vast herds of caribou, the threatened polar bear, and millions of breeding birds," said Jodi Hilty, Director of the Wildlife Conservation Society's North America Programs.

WCS is engaged in separate studies in remote areas of the western Arctic, evaluating where wildlife protection would be most effective in

advance of development.

"Our interest is in ensuring a balance of both wildlife protection in key areas and helping industry minimize potential impacts to wildlife as they begin to pursue development in western Arctic Alaska," said Steve Zack, coauthor and Coordinator of the [Arctic](#) Program for WCS. "This study helps inform industry on some consequences of development."

Source: Wildlife Conservation Society ([news](#) : [web](#))

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