

Hareless: Yellowstone's rabbits have vanished, study says

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Jack rabbits like these have mysteriously vanished from Yellowstone, a Wildlife Conservation Society study says. Credit: Joel Berger/Wildlife Conservation Society

A new study by the Bronx Zoo-based Wildlife Conservation Society found that jack rabbits living in the Greater Yellowstone Ecosystem have apparently hopped into oblivion. The study, which appears in the latest issue of the journal *Oryx*, also speculates that the disappearance of jack rabbits may be having region-wide impacts on a variety of other prey species and their predators.

According to the study, historical records from more than 130 years ago indicate that white-tailed jack rabbits were once locally abundant in Greater Yellowstone, a 60,000 square kilometer (23,166 square mile)

ecosystem that contains both Grand Teton and Yellowstone National Parks. However, the WCS study found that no jack rabbit sightings could be confirmed in Yellowstone since 1991 and only three in Grand Teton since 1978.

No one knows what caused the rabbits to disappear, according to the study's lead author, Dr. Joel Berger, a Wildlife Conservation Society conservationist, and professor at the University of Montana. "It could be disease, extreme weather, predation or other factors," Dr. Berger said. "Since the rabbits blipped off without knowledge, there has simply been no way to get at the underlying cause."

Dr. Berger believes that the absence of jack rabbits – historically important prey species in the Greater Yellowstone Ecosystem – may be causing elevated predation by coyotes on juvenile elk, pronghorn and other ungulates. Elsewhere, when rabbit densities drop predators often turn to preying more on livestock, according to the study. But without baseline data on rabbit numbers in Greater Yellowstone, assessing the impacts of predators such as grey wolves, which were reintroduced in 1995, becomes more difficult.

"Lacking a sense of historical conditions, it will always be difficult to decide whether current systems function ecologically like past ones," said Dr. Berger.

Berger goes on to suggest that wildlife managers should consider reintroduction of white-tailed jack rabbits into Grand Teton and Yellowstone National Parks. "Reintroduction may result in the establishment of dynamic ecological processes that were intact before rabbits vanished from the ecosystem," Dr. Berger said. "From the perspective of ecological health and wildlife conservation, reintroduction would also show that species loss has serious ecological costs."

Source: Wildlife Conservation Society

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