

## Nearly extirpated by plague and distemper in the 1980s, Black-footed Ferrets now vaccinated for covid-19

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Two-thirds of captive Black-footed Ferrets *Mustela nigripes* have been vaccinated for covid-19 (Fritts 2021, Learn 2021). There are no known cases of these ferrets contracting the disease so far (Fritts 2021, Learn 2021).

The Black-footed Ferret was listed as endangered by the U.S. Fish and Wildlife Service in 1967 and the species was believed to have become extinct in 1979 (Black-footed Ferret Connection no date). A wild population discovered in Wyoming in 1981 was nearly extirpated by sylvatic plague and canine distemper (Fritts 2021). The 18 surviving animals were captured and became the foundation for the Black-footed Ferret breeding programme that continues today (Fritts 2021). There are now about 320 individuals in captive breeding centres and about 300 in the wild (Fritts 2021).

When the covid-19 pandemic spread in early 2020, researchers and breeding programme managers were concerned about the potentially catastrophic impact of the virus on Black-footed Ferrets, which are closely related to other small carnivores that were known to succumb to the disease (Fritts 2021, Learn 2021). Ferret buildings were locked down, barriers erected between individual enclosures, and contact between caretakers and between caretakers and ferrets was minimized (Fritts 2021, Learn 2021).

In 2020, two-thirds of ferrets at the National Black-footed Ferret Conservation Center in Colorado, the main hub in the captive-breeding and release programme, were vaccinated with a version of the Moderna or Pfizer vaccinations now being used for humans (Learn 2021). Six vaccinated post-breeding-age Black-footed Ferrets experimentally exposed to covid-19 became infected but did not become seriously ill (Fritts 2021).

The pandemic did have a negative impact on ferret conservation, including an approximate 50% drop in kits produced (Fritts 2021). Numbers have rebounded, however. The breeding facility in Phoenix, Arizona, had its best breeding season in 20 years and, as of September 2021, the programme aimed to release about 200 ferrets into the wild this year (Fritts 2021).

## References

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