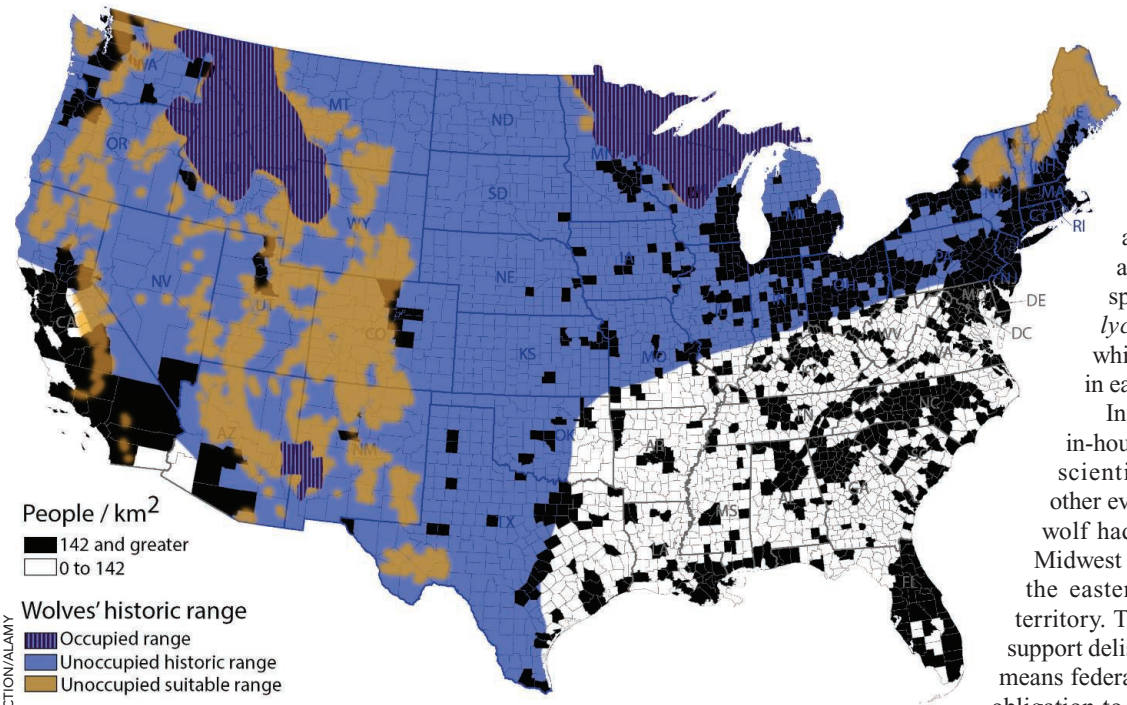

Contraction. Gray wolves once inhabited a large swath of the continental United States, but are now confined to a few areas.

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ENDANGERED SPECIES

Science Behind Plan to Ease Wolf Protection Is Flawed, Panel Says

A controversial proposal to lift U.S. government protections for most gray wolves living in the lower 48 states suffered a major blow last week, when an independent review panel nixed the underlying science. The U.S. Fish and Wildlife Service (FWS) had argued that the gray wolf, which has rebounded in some parts of the West, does not need continued protection to recover in the East because it never lived there. But the four-member panel unanimously dismissed that argument, saying it "does not currently represent the 'best available science.' "

The verdict is widely seen as a game-changer. "The service will have to take this into account," says Steven Courtney, an ecologist at the National Center for Ecological Analysis and Synthesis (NCEAS) at the University of California (UC), Santa Barbara. Courtney led the NCEAS review, which the agency requested.

The panel's 7 February report is the latest twist in a messy and emotionally fraught saga. Wolf researchers estimate that some 2 million wolves lived in the continental United States 600 years ago (see map). After being hunted to near extinction, the gray wolf (*Canis lupus*) was placed on the federal endangered species list in 1975. It was later reintroduced in the Rocky Mountains over vehement objections from ranchers and others. The population ultimately recovered to some 6000 animals in some western and upper midwestern states, and in 2011 the federal government lifted wolf protections in six of those states, all of which now have legal hunts. In June 2013, FWS released its proposal to totally remove the gray wolf from the endangered species list in every state, while adding protections for the Mexican gray wolf, a subspecies in the Southwest. It also proposed to recognize a new—and controversial—species of wolf, *Canis lupus lycaon*, or the eastern wolf, which some argue is found today in eastern Canada.

Legal hunt. Hunters in Idaho and five other states can now kill wolves.

In a 2012 monograph published in-house without review, four FWS scientists drew on genetic and other evidence to argue that the gray wolf had never inhabited the upper Midwest and Northeast; instead, only the eastern wolf had occupied that territory. That scenario, if true, would support delisting the gray wolf because it means federal officials don't have a legal obligation to try to restore the species to 22 eastern states.

But the NCEAS panel, which included specialists on wolf genetics, said the idea of an eastern wolf is "not universally accepted and … 'not settled,' " and rejected the idea that the two species had never mixed in the East. There's no question that the gray wolf used to be present in the East, too, says panelist Paul Wilson, a conservation geneticist at Trent University, Peterborough, in Canada, who believes that the eastern wolf is a separate species.

It appears the agency was trying to use "some kind of taxonomic sleight of hand" to support delisting, says panelist Robert Wayne, a conservation geneticist at UC Los Angeles. That would set a "dangerous precedent," he adds: It would be the first time that the federal government has removed a species from the list as a result of a taxonomic redefinition, and not a population recovery.

It's not yet clear how FWS will respond to the setback. Agency Director Dan Ashe called the NCEAS report "an important step" in a statement, but didn't tip his hand. The agency has reopened public comment on the delisting proposal until 27 March; so far, more than 1 million people have sent in responses, the most in the agency's history.

In the meantime, wolves continue to be heavily hunted in the states where delisting has occurred, with at least 1000 killed in the current season. Those states are allowed to reduce the number of wolves within their borders to 100 animals, or 10 packs with 10 individuals each. But some scientists fear that is too few to maintain healthy populations over the long term.

–VIRGINIA MORELL