

Agency plans are inadequate to conserve U.S. endangered species under climate change¹



PHIL ARMITAGE



FWC/CAROL LYNN PARRISH

Despite widespread evidence of climate change as a threat to biodiversity, it is unclear whether government policies and agencies are adequately addressing this threat to species. In a 2019 peer-reviewed article published in the leading journal *Nature Climate Change*, researchers compared the sensitivity of species to climate change—which is a component of climate change vulnerability—and whether climate change is discussed as a threat in planning for climate-related management action in official federal documents published through 2018 for all 459 U.S. animals listed as endangered under the Endangered Species Act.

The data showed that **99.8% of endangered animal species in the U.S. are sensitive** to one or more of eight life-history factors evaluated. Unfortunately, **agencies consider climate change as a threat to just 64% of these species** and **plan management actions to address the climate threat for only 18% of them.** Agencies were more likely to plan actions for species sensitive to more factors, but such planning has declined since 2016.

What does this mean for the nation's most imperiled animals? Species like the **California condor**, once at the very edge of extinction but now on a path to recovery, are highly threatened by lead and other contaminants that could increase in toxicity with warmer temperatures. The current federal recovery plan for the condor only recommends studying the effects of climate change on the species. **Key deer**, a species restricted to the Florida Keys that are disappearing under rising seas, only receive management direction of “more study” of the climate threat. Similar patterns hold for many of the other endangered animals examined in the research.

The results of this new research highlight the gap between the widespread sensitivity of species to climate change and the insufficient attention from federal agencies charged with conserving endangered species. As the U.S. develops new laws and policies to address climate change and allocates conservation funding, it is essential to take steps to close the gap identified in this research. Federal agencies must recognize the threat of climate change to our most imperiled animals and plan for how to mitigate and support species adaptation to its effects.

¹Delach et al. 2019. Agency plans are inadequate to conserve US endangered species under climate change. *Nature Climate Change*. <https://www.nature.com/articles/s41558-019-0620-8>

