

Now endangered: The very act that protects wildlife

August 15 2019, by Kristen Cole



Credit: CC0 Public Domain

The Trump administration recently announced a proposal that would gut the Endangered Species Act. The news follows in the wake of a report from the United Nations earlier this year that more than 1 million plants and animals around the world face extinction, some within decades, owing to human development, climate change and other threats. Mark



Urban, director of UConn's Center of Biological Risk, and associate professor of ecology and evolutionary biology, explains what the change would mean for America's wild animals and plants.

Q: In the 46 years since it was signed into law by President Richard Nixon, how has the Endangered Species Act protected imperiled wildlife?

A: The creation of the Endangered Species Act, often called by its acronym ESA, created a framework for protecting declining <u>species</u>, which has served as a template for conservation efforts worldwide. The act creates a list of threatened and <u>endangered species</u>, develops recovery plans for those species, and ultimately provides a way to de-list them once they recover.

Currently more than 1,600 plants and animals are listed as endangered or threatened, ranging from the Alabama cavefish to the Zuni bluehead Sucker. In Connecticut, it protects beloved species like the bog turtle and small whorled pogonia orchid.

Q: Has the act been successful?

A: Based on expert analyses, the ESA likely prevented the extinction of more than 200 species. We can point to great American success stories such as the Brown Pelican, American Alligator, Gray Wolf, and the emblematic Bald Eagle, all endangered at one point, but now roaring back into our wilderness and our lives, thanks in no small part to the ESA.

Eleven species did ultimately go extinct, so it cannot be called an unqualified success. However, to be clear, it's really difficult to save a species once it's so far gone. Think of it as sending a vase of water



crashing down the stairs and then trying to put it and the water back to the way they were. It is much more effective and cheaper to protect species before they become critically endangered and extraordinary measures must be taken. We should start protecting species when the first crack appears, not after the population has crashed.

Q: How are the different designations—threatened, endangered, extinct—defined?

A: Endangered status means that a species is in danger of extinction in most of its range, and threatened status means that a species is likely to become endangered in the foreseeable future. Extinction is, well, forever.

Q: What would the current proposal do?

A: Forgoing Congressional review, the U.S. Fish and Wildlife Service has issued changes to how the existing law is interpreted and implemented. Although the changes often involve slight changes to or deletions of text, many scientists fear that, in practice, these changes could make the act substantially less effective at protecting and restoring American wildlife.

One change could reduce protections for newly listed threatened species. Currently, most threatened species enjoy the same protections as endangered species. However, <u>new regulations</u> would make speciesspecific rules, which may or may not be consistent with the greater protections afforded by endangered status.

Another change seemingly allows for economics to play a role in listing decisions rather than just scientific data. Because the original law has language preventing the use of economics, it appears that the Fish and



Wildlife Service can only collect this information and publicize it. However, the changes certainly open the door to discussions about the costs versus the benefits of listing species, which could spell trouble especially for those species finding themselves with the audacity to live on lands of high human value.

An important change in implementation might weaken protections for critical, but currently empty, habitats. You can imagine that an endangered species will occupy a small sliver of its former habitat. Science often indicates that this habitat should be protected so that it is available to allow a future, recovered species to return. Now those decisions will be made on a case-by-case basis given available data, and the fear is that when data is not available, those habitats will be allowed to slip away.

Another alteration to the ESA makes it more difficult to list species based on future risks. This change gives officials more leeway in deciding that a risk is not an immediate one, such as climate change impacts. For example, <u>polar bears</u> in Alaska were listed as threatened given the certainty of melting of sea ice and their subsequent decline, yet these risks might not have risen past this new threshold for listing.

Scientists and conservation organizations are worried about the changes. However, the impact will depend on the outcome of several lawsuits underway and how future agency officials choose to interpret the changes. The Fish and Wildlife Service is, by and large, an apolitical group of scientists and resource managers looking to fulfill their duty to protect wildlife. However, given the pressures not just from industry groups but now from the executive branch, many believe that the changes will weaken protections.

Q: Did this proposal surprise you?



A: Unfortunately, these changes did not surprise me. The Trump administration has long signaled its intent to revise the Endangered Species Act. Moreover, the move fits in with the current administration's pattern of eliminating regulations and placing a greater value on business interests over protections for humans and wildlife.

Sadly, I think that both aims can be reached. I believe that the ESA could be implemented more efficiently and effectively while lessening impacts on businesses and individuals. Such efforts to work with states and landowners to find win-win solutions were under way in the previous administration. The current direction is more one-sided.

Q: How do business interests apply to wild animals or plants? Can you give me an example of how economics figures into the assessment of wildlife in listing decisions?

A. Currently, costs do not figure into decisions about listing species, but new rules could create an opening for such decisions. The cost part defines how much listing a species would amount to both in terms of direct recovery efforts and losses to affected businesses and landowners. For example, when spotted owls were listed in the Pacific Northwest, some logging companies were prevented from logging parts of their land. The difficulty comes in measuring the benefit part of the equation. Part of the benefit is the degree to which recovery plans will work, but monetary benefits might also figure into such decisions. Wildlife can and do generate substantial economic benefits through activities like tourism, but the manifold benefits to humans are often much more difficult to account for relative to pure business activities—wildlife seldom keep a ledger of their economic gain.

Q: In the immediate future, if these new rules take



effect, which animals and plants are most vulnerable?

A: Most of the new rules affect the listing of new threatened species. Dozens of species are under review for listing, and hundreds more could be added in coming years. Those species threatened by longer-term threats, such as climate change, or inhabiting especially prime habitat, such as those located in fossil fuel-rich areas, are likely to be most affected.

Q: Why should we protect threatened and endangered species?

A: Scientists have defined a new geological epoch of mass extinctions on Earth. A recent United Nations report suggests that a million or more species are at risk from habitat loss, overexploitation, and increasingly the impacts of <u>climate change</u>. One of the few things standing in the way of this mass extinction are laws that protect a nation's species such as the ESA.

Failing this rescue mission, we risk losing Earth's greatest resource: the library of natural selection. By encoding millions of years of the answers to nature's challenges, biodiversity provides us with the drugs in our medicine cabinet, tools in our intellectual workshop, and solutions to the world's present and future problems. Unfortunately, we're burning the greatest books on Earth before we have even read them.

Besides direct human benefits, many people believe in the ethical obligation to safeguard nature for future generations. I can't speak for future generations, but I believe that they would not want us to destroy their natural heritage for our short-term gain.



Provided by University of Connecticut

Citation: Now endangered: The very act that protects wildlife (2019, August 15) retrieved 28 April 2024 from <u>https://phys.org/news/2019-08-endangered-wildlife.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.