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## Saving Emperor Penguins Requires Swift Climate Action



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They are Antarctica's answer to Hollywood -- appealing little movie stars at the center of one of the most critically acclaimed, financially successful nature films ever made.

Audiences around the world were captivated by March of the Penguins, a 2005 film that grippingly depicted the almost unfathomable hardships the emperor penguin endures to nurture each new generation. In darkness and extreme cold, the males protect their mates' eggs as they fast for months through the world's harshest winter weather.

But despite March of the Penguins' immense popularity, emperor penguins themselves are in deep trouble. The penguin colony featured in the film has declined by more than 50 percent. The Dion Island colony in the Antarctic Peninsula has disappeared completely. Andone recent study projected that nearly half of the world's emperor penguins may disappear by mid-century.

The main culprit: Climate change. Emperor penguins live in one of the most isolated places on earth. But neither that isolation nor their legendary powers of endurance can protect these icons of wild Antarctica from the deadly consequences of our planet's rising temperatures and changing oceans.

That's why I was pleased by a recent announcement from the U.S. Fish and Wildlife Service -- in response to a petition filed by my organization -- that the emperor penguin

may warrant Endangered Species Act protection based on threats from climate change. Federal officials have agreed to conduct a full scientific review to determine if the emperor penguin should be protected under the act.

That protection is badly needed. Emperor penguins rely on sea ice for raising their chicks and foraging -- and our carbon pollution is melting this sea-ice habitat in many regions of Antarctica. In areas where sea ice is rapidly disappearing, some emperor penguin populations are declining or have been lost entirely.

One recent study found that penguins at four colonies were forced to climb up steep ice shelves to find nesting sites in years when sea ice was not available.

Warming ocean temperatures and melting sea ice in the Southern Ocean encircling Antarctica have also diminished the availability of krill -- a key food source for emperor penguins. Krill has declined by as much 80 percent since the 1970s over large areas of the Southern Ocean. Ocean acidification resulting from the ocean's absorption of carbon dioxide and growing industrial krill fisheries further threaten the penguins' food supply.

The bottom line: Emperor penguins need legal protections and rapid cuts in carbon pollution if they're going to have a future.

The Endangered Species Act could be a lifeline for these imperiled birds. Over the past 40 years, the act has rescued more than a thousand species from extinction. A listing would give the emperor penguin greater protections against the greenhouse gas emissions driving climate change and the industrial overfishing of key prey species. For example, if penguins are listed, future approval of fishing permits for U.S.-flagged vessels operating on the high seas would require minimization of impacts on penguins.

The act also requires federal agencies to ensure that their actions -- including those generating large volumes of carbon pollution -- do not jeopardize endangered species and their habitat.

But the penguins' plight also raises a larger issue. Emperor penguins, after all, are hardly alone in facing an existential threat from climate change. From polar bears to wolverines, species who make their homes in ice and snow are at risk, of course. And across the board, it's increasingly clear that climate change will take a catastrophic bite out of the world's biodiversity.

Scientists predict that by 2100 more than one in 10 species may be on the verge of extinction due to climate change. More than half the habitats of most plants and about one-third of animals will become climatically unsuitable by 2080 unless we curb carbon pollution, according to another recent study.

Here at home, an analysis by my organization found that hundreds of America's endangered species will be threatened by the sea-level rise alone - just one of climate change's many nasty side effects.

The Endangered Species Act can help us buy time for many of these animals. But we have to use that breathing space wisely. Unless we act quickly to cut greenhouse gas pollution, our world will lose many of the amazing animals and plants that make this green planet a lovely place to call home.