

[◀ Back to Article](#)[🖨 Click to Print](#)**TIME**

Thursday, Jun. 04, 2009

# What Is Killing Chile's Coastal Wildlife?

By Gideon Long / Santiago

First, in late March the bodies of about 1,200 penguins were found on a remote beach in southern Chile. Next came the sardines — millions of them — washed up dead on a nearby stretch of coastline in April, causing a stench so noxious that nearby schools were closed and the army was called in to shovel piles of rotting fish off the sand. Then it was the turn of the rare Andean flamingos. Over the course of approximately three months, thousands of them abandoned their nests on a salt lake in the Atacama Desert in the far north of Chile. Their eggs failed to hatch, and all 2,000 chicks died in their shells. Finally, in late May came the pelicans — nearly 60 of them, found dead on the central Chilean coast.

No one knows exactly what has caused these four apparently unrelated environmental disasters in as many months. Global warming has been blamed, as has overfishing, pollution and disease. In northern Chile, ecologists have accused mining companies of fatally altering the flamingos' habitat by draining the area's subterranean water. There was speculation that the penguins might have starved to death as a result of the depletion of fish stocks, although a preliminary report by a local university now suggests they were killed by a bacterial infection. ([Watch a video about wildlife on the brink of extinction.](#))

Whatever the explanations, the events have caused unease among Chileans — a sense of guilt over not doing enough to protect their country's spectacularly rich wildlife. "Chile has very primitive legislation governing the management of its fisheries," says Alex Muñoz, executive director of Oceana, an international marine-conservation group with offices in Santiago, Chile's capital. "We have a big problem with overfishing. Our industrial trawlers are having a huge impact on the seabed. We should consider these problems if we want to work out what caused the death of the penguins and the sardines."

Fishing authorities have said a sudden rise in water temperature might have killed the sardines,

although they don't know why, and local fishermen say that's impossible. "If that's the case, why is it only sardines that have died, and why only here?" asked Jorge Pereira, an adviser to local fishermen groups. He suspects that trawlermen hauled a huge quantity of sardines from the ocean but could carry only a small fraction of them back to shore and therefore dumped the rest — dead or dying — back into the sea. ([See pictures of this fragile earth.](#))

The case of the unhatched chicks is perhaps the most disturbing of the four events. Of the six species of flamingo in the world, the Andean is the rarest. There are just 40,000 of them, and about half live in Chile, where they nest on the barren salt flats of the Atacama Desert. They share this harsh desert habitat with Chile's big copper mining companies. Some ecologists say the mining is destroying the area's fragile ecosystem and threatening its wildlife.

But another, perhaps more likely, explanation for the death of the chicks is that this was a hot, dry summer in the southern hemisphere, even by the standards of the Atacama. That caused the lakes to shrink and become more saline than usual. Eduardo Rodriguez, the regional head of the government's environmental protection agency CONAF, says the high temperatures might have killed the micro-algae on which the flamingos feed, forcing the birds to abandon their eggs and migrate in search of food.

The Atacama's hotter summer is seen by some as a symptom of global warming, which may force the flamingos to flee to higher, cooler and damper nesting grounds. That theory was supported by an unprecedented discovery in the northern Chilean Andes this summer — a flamingo nest at more than 4,000 meters above sea level. Usually the birds nest at around 2,000 meters and seldom settle in the very high mountains. "This is the first time we've seen anything like that," says Rodriguez, who fears this could be the start of a pattern in which flamingos try to adjust to unfamiliar nesting grounds, with all the risks that entails. "In the next 10 years, we were hoping for the birth of around 20,000 chicks to replenish the population," he says. "But if the breeding season is a failure again next year and if we don't have chicks in the third, fourth or fifth years, then I think we'll have to sound the alarm bells."

[See more about saving endangered species.](#)

[See TIME's Pictures of the Week.](#)

 [Click to Print](#)

**Find this article at:**

<http://content.time.com/time/world/article/0,8599,1902885,00.html>

Copyright © 2014 Time Inc. All rights reserved. Reproduction in whole or in part without permission is prohibited.

[Privacy Policy](#) | [Add TIME Headlines to your Site](#) | [Contact Us](#) | [Customer Service](#)