How global warming affect penguins?

Many scientists think that global temperatures are increasing. According to the National Aeronautics and Space Administration (NASA), Earth’s temperature has risen 1.4 Fahrenheit degrees (about 0.8 Celsius degrees) since 1800, and global sea levels have risen about 178 millimeters during the last 100 years. These phenomena appear to have their origin in many human activities that release greenhouse gasses and prevent heat from escaping the atmosphere into space.

Global warming is wreaking havoc on living beings gradually, and this damage is a consequence of this phenomena. Penguins, species that need cold water to survive, are among the most affected animals, as they are particularly sensitive to climate changes. Even penguins living in warm regions such as [Galapagos penguins (Spheniscus mendiculus)](https://www.penguins-world.com/galapagos-penguin/) and [Humboldt penguins (Spheniscus humboldti)](https://www.penguins-world.com/humboldt-penguin/) depend on ocean currents carrying large volumes of cold water, nutrients, and the algae that feed on these. If this species supports a climate of up to 28° C, is because the cold waters where it swims and searches for food. Then, it is easy to imagine what can happen to penguins if the temperature of the ocean increases.

One of the most worrying consequences is the increase in the frequency and intensity of the phenomenon called “El Niño,” which causes abundant rainfall and makes the surface temperature of the Antarctic Ocean to rise. As a result, a layer of hot water on the surface prevents the nutrient-rich cold waters from ascending, so the small animals that need them, such as crustaceans like krill, do not come for food. Penguins that feed on krill, especially in the Antarctic, could see their food sources reduced.

Poorly fed penguins are more vulnerable to diseases and death. Consequently, the survival of krill is key to the survival of Antarctic penguins and other oceanic species.

But even temperate penguins, which consume more fish and squid, could be in danger. For example, more than three-quarters of the Galapagos penguins died during the strong “El Niño” phenomenon during 1982 and 1983, and many [Magellanic penguins (Spheniscus magellanicus)](https://www.penguins-world.com/magellanic-penguin/)have moved to other places following their prey.

It is not a secret that sea ice layers are melting fast. And not only polar bears and walruses resent these changes; many penguins too. Although they spend up to 80 percent of their life at sea and only two species spend their entire life on Antarctica, many species depend on icebergs to establish their colonies or protect from marine predators such as sharks and leopard seals. If they lose these places, they are in a severe predicament. Take the case of emperor penguins that nest in the Géologie Archipelago: as temperatures are getting warmer, the sea ice layers are becoming thinner and therefore more fragile. If the ice breaks, many chicks may fall into the ocean before they have the feather insulation to protect them from the icy waters nor the necessary skills to survive on their own.

About the above, the populations of [Adélie penguins](https://www.penguins-world.com/adelie-penguin/) from the north of the Antarctic Peninsula are reducing, and many of them are moving towards sites further south, especially the Ross Sea. One even more worrying data is that Antarctic krill population has decreased by 80 percent because of the sea ice, reduced and thinner by global warming, does not provide the adequate shelter to this species. Penguins usually look for krill just below the icebergs.

Researchers fear that global warming, and consequently climate change, will impact primarily on the Antarctic species and that the decline of their populations will continue to be unsustainable. Fortunately, some people are implementing conservation efforts to avoid it, but it seems that they are not enough.