

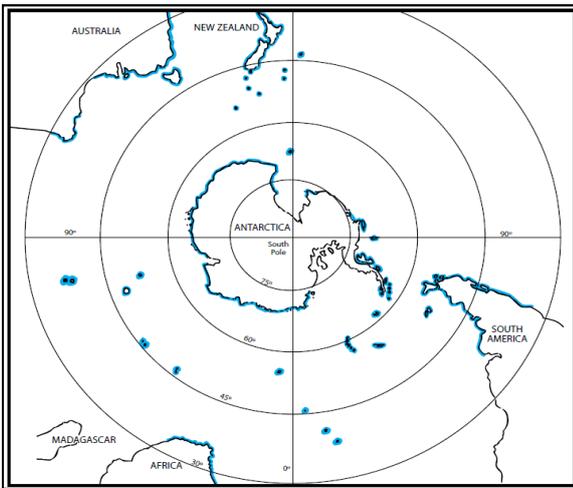
Penguins of the World

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There are 18 different penguin species, all found in the Southern Hemisphere. Contrary to popular belief, you will never see a penguin and a polar bear together in the wild as polar bears live in the far north of the Northern Hemisphere. Most penguins are black and white, but some penguins have small patches or crests of yellow or orange around the head or neck. One species, the little penguin, is blue and white.

Habitat

Penguins have a diverse habitat between species. They live in temperate climates like Australia, New Zealand, South America, southern Africa as well as in freezing climates like Antarctica and sub-Antarctic Islands. The furthest north is the Galapagos penguin and the furthest south is the emperor penguin. They are social creatures so spend time on land in colonies. Some species build burrows for protection and raise their chicks, others stand out in the open and protect their young with their bodies.



Diet

Generally a penguin's diet consists of small schooling fish, squid or krill (a shrimp-like crustacean). The little penguin has also been found to eat sea jellies as well. They are visual predators and dive the ocean depths as far as the light penetrates. However some species can dive even deeper, using bio-luminance to locate their prey.

Species of penguins:

Adelie; African; Chinstrap; Emperor; Erect-crested; Fiordland; Galapagos; Gentoo; Humboldt; King; Little; Macaroni; Magellanic; Southern Rockhopper; Northern Rockhopper; Royal; Snares; Yellow-eyed.



Statistics —Smallest vs Biggest

	Little Penguin	Emperor Penguin
Weight:	1kg	30kg
Length:	33cm	112cm
Life:	7 years	20 years

Breeding

All penguin species must return to land or ice for breeding. They will time breeding to an optimum time for productivity in the ocean for finding food to their chicks. Emperor and king penguins lay one egg while all other penguins lay two eggs. When laying two eggs, they are spaced between 24-48hrs apart. Some penguins that lay two eggs will discard one of the eggs, only attempting to raise one chick. Except for the emperor penguin, all adult penguins will co-parent to incubate the eggs. The male emperor penguin will incubate the egg alone until just before it hatches to allow the female to hunt. Penguin parents will return to land to feed their chicks via regurgitation. Parents bring the food up so chicks can eat directly from the parent's mouth. Chicks hatched with a fine down ideal for warmth but must grow their full waterproof feathers before fledging. Adelie chicks will be ready to fledge between 7-10 weeks where as king penguin chicks take up to 13 months. Once the chicks fledge and go to sea there is no more parental care, the fledglings must teach themselves how to hunt for food through trial and error.

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Spotlight on a species

Emperor penguin—112cm

Aptenodytes forsteri



Conservation Status: Near threatened

Emperors are the tallest of all penguins and breed on sea ice which makes them vulnerable to the effects of climate change.

Adélie penguin—71cm

Pygoscelis adeliae



Conservation Status: Near threatened

Adélie penguins build nests from stones, bones and moss and lay two eggs, three to four days apart.

Adaptations

Penguins can spend up to 80% of their lives in the ocean. They have a streamlined body that tapers at either end to help travel efficiently through the water. They use flippers that have adapted from wings to move through the water, diving and chasing their prey. The depth penguins can dive is relative to their body size, for example, an emperor penguin can dive to 565m and stay underwater for over 22 minutes, compared to the little penguin can dive to 72m and holds its breath underwater for almost two minutes. The colouring of penguins provides camouflage from predators and prey while in the water. A dark back makes the penguins hard to spot from above, and the light front makes them hard to spot from below. Penguins have an insulating fat layer in their skin but to keep them warm they mostly use the insulation provided by their feathers. If the feathers are not well waxed and intact, water seeps through to the penguin's skin, and it gets cold very quickly. To help with this, each year the penguins moult all their feathers at once. Moulting is the process where new feathers replace a penguin's old feathers. The penguins are not waterproof during the moult and must stay on land and live off fat reserves during moulting.

Galapagos penguin—48cm

Spheniscus mendiculus



Conservation Status: Endangered

The most northerly of all penguins, 77% of the population was wiped out in the 1980s due to severe weather changes resulting from El Niño and the warming of the Pacific ocean.

Little penguin—33cm

Eudyptula minor



Conservation Status: Least concern

An estimated 32,000 penguins live on Phillip Island—one of the largest and most protected little penguin colonies in the world.

Threats

Penguins face many natural threats in the wild including predators both in the water and on the land. They also have the natural hardships of surviving the ever changing conditions of the oceans and the availability of food. Human-related threats include over-fishing, pollution such as oil spills, disruption to food chains, development of coastal areas, marine debris and introduced land predators such as foxes, cats, dogs, ferrets and stoats. Human-induced climate change is also altering habitats by warming ocean temperatures which not only melts ice platforms, but changes the productivity of the ocean. To help all penguin species, please put all your rubbish in the bin, buy fish-free cat food and sustainably harvested fish species and reduce your carbon footprint by using sustainable energy.



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