

Intro	
The emperor penguin is the largest of 17 species of penguin at 1.15 m (45 in.) tall .	
Emperors are perhaps the only species of bird that never sets foot on land.	
Observations suggest that some individuals may live to 50 years of age.	
There are approximately 595,000 adult Emperor penguins in Antarctica.	
There are now thought to be about 54 emperor colonies in the Antarctic.	

Diet/what do they eat	
The male emperor penguins must cope with the worst weather conditions on earth, all the while eating nothing.	
By the time the female lays her egg (usually around June), she's worked up a big appetite! She passes the egg to the male before journeying up to 80km to the open ocean where she can feed her hungry tummy on fish, squid and krill.	
They need to rely entirely on the reserve of body fat that they built up during the summer feast to survive the long winter	
An adult penguin eats about 2-3 kg per day, but on a good day they can eat twice this much to build up their store of body fat for the long winter, or for feeding their chicks.	
The emperor penguin's typical diet consists of fish, krill, squid and crustaceans	
Fish is the most important food source for emperor penguins, with the Antarctic silverfish accounting for most of the penguin's diet	

Habitat/where do they live?	
It is also the only animal to inhabit the open ice of Antarctica during the winter.	
They face wind chills as cold as -60°C (-76°F) and blizzards of 200 km/h (124 mph).	
Despite such harsh conditions, emperor penguins spend their entire lives on the ice or in the surrounding waters of Antarctica	
Emperor penguins spend their entire lives in Antarctica - the Earth's southernmost continent - where temperatures can drop to as low as -60°C.	

Appearance/what do they look like?

Adults have a white stomach and a black head, back, tail and wings. They also have yellowy-gold markings on the side of their head and neck. Emperor penguins are similar to king penguins but the emperors have yellow patches around their ears whereas the king penguins have orange patches.

Predators

Although emperor penguins are effective hunters, they are also prey to a few Antarctic animals as well.

Only a third of the juvenile penguins will make it to their first birthday, falling prey to seabirds like giant petrels or skuas.

In the water, both juveniles and adults are eaten by leopard seals and killer whales.

Adaptations/how are they adapted?

Four layers of scale-like feathers protect them from icy winds and provide a waterproof coat.

The penguins can store large amounts of fat which insulates their bodies while also serving as a long-lasting energy source.

Emperor penguins are also specially adapted to traveling in this extreme habitat. On the ice masses, they use strong claws on their feet to help grip the surface as they shuffle along.

They also slide on their sleek bellies while pushing with their feet.

These birds are super swimmers and impressive divers. They can reach depths of over 500m and stay underwater for up to 22 minutes!

They can dive deeper than any other bird - as deep as 565 m (1850 ft.) - and they can stay under for more than 20 minutes.

Careful to keep the egg sheltered, the male will balance the egg on his feet and cover it with a warm layer of feathered skin called a brood pouch.

To withstand the harsh winds and blizzards, the penguins huddle together in groups. They take turns moving towards the inside of the pack, where it is warmer, thereby sustaining the entire group.

Future

According to the IUCN Red List, emperor penguins are considered near threatened.

Overfishing will mean less food for them to eat.

You can also donate to charities to help preserve emperor penguin habitat or adopt a penguin through WWF.