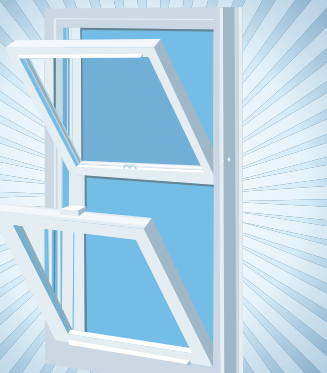


Opening the Windows of Curiosity

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WORLD OF WONDER

Penguins have white bellies and dark backs. These colors make penguins less visible in water.

Exploring the realms of history, science, nature and technology

PENGUINS

Penguins are aquatic, flightless birds that live almost exclusively in the Southern Hemisphere. Like all birds, they lay eggs and have feathers, but these peculiar creatures have clawed, webbed feet and wings that work like flippers. Penguins can spend up to 80% of their time in the water where they hunt.

In a word

The first animal called a penguin was the **great auk**. This flightless bird was hunted to extinction and was last seen in 1844. It lived in the seas around Newfoundland in Canada.

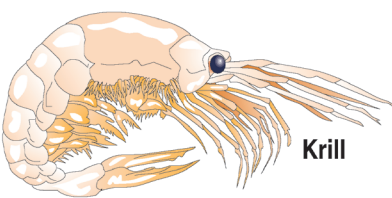
The origin of the word **penguin** is still debated. The word may have originated from the Welsh *pen gwyn* ("white head"), or from the Latin *pinguis* ("fat").

A group of penguins is called a **colony**. During breeding season, penguins come ashore to form huge colonies called **rookeries**.

Dinnertime

Penguins are carnivores and eat only meat. They hunt their prey under water, catching food in their beaks and swallowing it whole. They eat **krill** (tiny crustaceans), **fish** and **squid**.

In general, penguins closer to the equator eat more fish, and penguins closer to Antarctica eat more squid and krill.



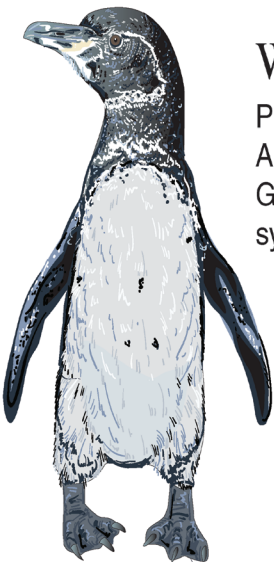
Bringing up baby

Most penguins choose a single new mate each mating season, but some mate for life.

Penguins are mature enough to breed when they are 3 to 8 years old. The male usually starts the mating ritual and will pick out a nesting site.

Most penguins lay two eggs. Parents take turns keeping the eggs warm between their legs.

It can take up to three days for a chick to break through the shell of the egg. The parents take turns feeding their offspring regurgitated food. Penguin parents can identify a chick's unique call.



Galapagos penguin
The only penguin that lives north of the equator in the wild, the Galapagos penguin is endangered, fewer than 2,000 survive.

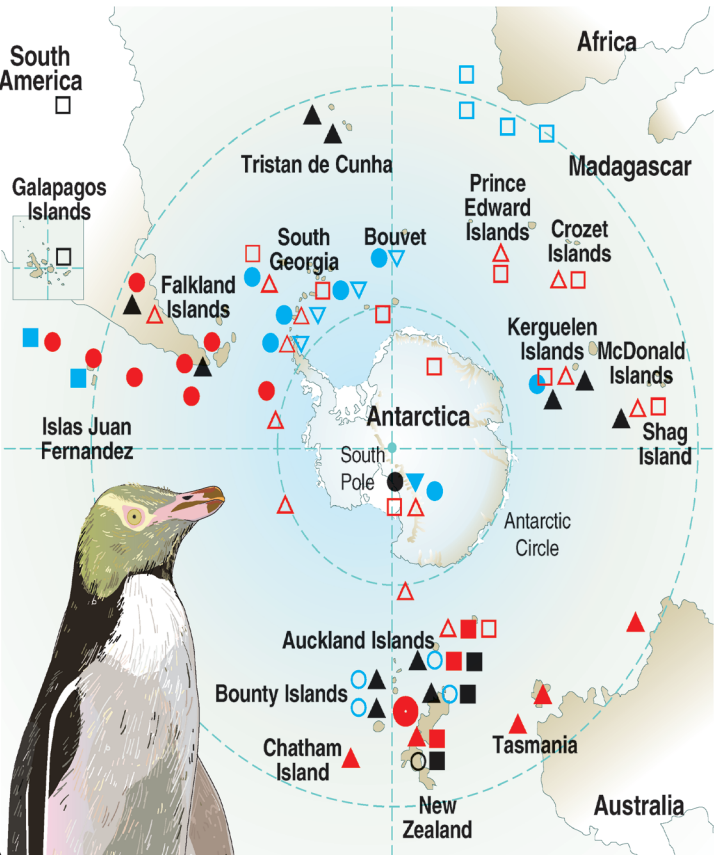
Penguins have a protected ear canal under the feathers.



Emperor penguin
The largest species of penguin, the emperor stands between 44 and 48 inches (25 to 30 cm) tall. There are more than 40 colonies of emperors distributed around Antarctica, with a total population of around 595,000.

Where they live

Penguins are found on every continent in the Southern Hemisphere. Although many penguins prefer cold climates, some such as the Galapagos penguin live on tropical islands at the equator. Use the symbols on this map to identify where each species can be found.



Yellow-eyed penguin
The fourth-largest and most endangered penguin species, this bird stands 24 to 31 inches (62 to 79 cm) tall. Yellow-eyed penguins will dive nearly 400 feet (120 m) as many as 200 times a day in search of food.

Some other species

- King
- Gentoo
- Chinstrap
- Magellanic
- Erect-crested
- Royal
- Peruvian
- Fiordland crested
- Snares Islands

Penguins don't get cold, thanks to their fat. Fat is a good insulator against cold and is an energy reserve. Usually, the colder the habitat, the larger the penguin.



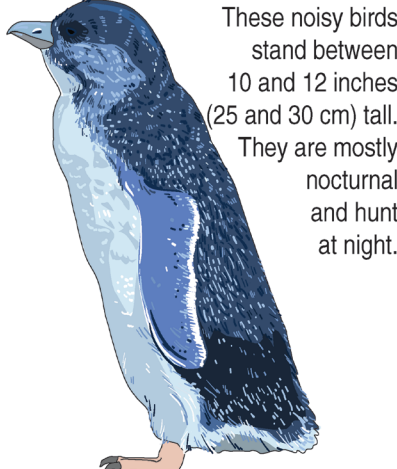
Adelie penguin
The most-studied penguin species, the Adelie lives in open areas of ice-free, rocky coastline. This medium-sized penguin stands 27 to 29 inches (70 to 74 cm) tall. Pairs mate for life and use the same nesting site year after year.

Rockhopper penguin
The northern and the southern rockhopper are probably subspecies of each other. They stand 19 to 22 inches (48 to 56 cm) tall.



Macaroni penguin
This species is the most abundant of all penguins. While other crested penguins have yellow plumes, the plumes of this species are more orange. It stands between 24 and 28 inches (60 and 70 cm). Leopard seals and killer whales are the main predators of this bird.

Little blue penguin (Fairy penguin)



These noisy birds stand between 10 and 12 inches (25 and 30 cm) tall. They are mostly nocturnal and hunt at night.

Did you know?

The Adelie and emperor are often studied because they live on Antarctica year-round, making it easier for scientists to observe them.

Larger penguin species tend to live in colder climates, while smaller penguins inhabit warmer climates.

Penguins have wing bones, but they are flipperlike and better suited to swimming. Most penguins can swim 5 to 6 miles per hour (8 to 10 kph). They can swim so fast that they can propel themselves above the water more than 7 feet (2 m).

Penguins can remain submerged for 10 to 15 minutes before coming to the surface to breathe.

Penguins do not have teeth. Penguins **molt**, or lose their feathers, once a year.

Penguins have better eyesight under water than they do in air. Penguins can drink salt water because they have a special gland that filters salt from the bloodstream.

SOURCES: World Book Encyclopedia, World Book Inc.; <https://en.wikipedia.org>; <https://www.britannica.com>; <https://www.penguinworld.com>; <https://www.worldwildlife.org>; <https://www.worldanimalprotection.us>; <https://seaworld.org>; <https://www.discover-the-world.com>

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