



Not all of us fly

Moa

This wingless giant—it was as tall as a bus—lived on the isolated islands of New Zealand several centuries ago. Humankind is responsible for its extinction.

Variegated tinamou

The only bird on this page that could apply for a pilot's license is the tinamou. It flies short distances only, however, preferring to run on the ground whenever possible.

Common ostrich

The sight of the ostrich's strong thighs tells us that it is an exceptional sprinter. It can reach speeds of up to 70 miles an hour. It lays eggs of record-breaking size too.



Birds evolved from their distant ancestors: a small group of feathered dinosaurs. Over millions of years, birds succeeded in adapting to life in a great variety of environments. Dense feathers protect them from the frosts of the Arctic and the scorching heat of the desert. Some birds spend days on end in the air, while others are at home in the water. Not all birds use the advantages given by wings and flight in the same way. A small group of runners needs no wings at all, as these birds spend their whole lives on the ground. Well-known birds that move around only on their legs include ostriches and kiwis.

Greater rhea

Greater rheas find their food on the grassy plains of South America. Often, they group together in small flocks.

Southern cassowary

Cassowaries defend themselves with dagger-sharp claws. A kick from a jumping cassowary can cause fatal injury to a human.

· Emu

The emu is Australia's largest bird. It may not grow to be as large and speedy as the ostrich, but in a race it would beat the world's best athletes over distances both short and long.

Have wings, will fly

Wandering albatross

Thanks to its wingspan of over 10 feet, the albatross can cover hundreds of miles in a single day. It sails on air currents over the sea.

Barn swallow

The mud nests of swallows are often found on houses and farm buildings. Swallows feed on insects, which they deftly catch when in flight.

American flamingo

The beak of the elegant flamingo is well adapted for collecting and filtering out small organisms in the water. Flamingos gather in large flocks for feeding and migration.



The bird kingdom is extremely colorful and varied. A bird's body, wings, beak, and legs are adapted to the way of life of its species. The body of a flighted bird commonly has light, hollow bones and air sacs to enhance breathing and enable movement, even at high altitudes, where oxygen is scarce. As aerobatics and navigation require rapid processing of large amounts of data, the brains of most birds are relatively large and powerful. The broad wingspan of the wandering albatross and the Andean condor, for instance, enables them to sail on an air current without much effort.

Great crested grebe

The grebe is among those birds adapted for life on water. It gets its food by diving for it, and its nest is like a floating island.

Eurasian hoopoe

We find this beauty with its distinctive wing patterning and striking crest in Europe, Asia, and Africa. It uses its long beak to gather insects from the grass.

Red-and-green macaw

The feathers of the many species of parrot have a bright and varied palette. The hefty, long-tailed redand-green macaw inhabits the tropical rainforests of South America.

Relatives of the chicken

We can see how Galliformes live by watching ordinary domestic chickens. They forage for food on the ground using their strong legs. They fly only short distances, usually away from danger.

Red junglefowl

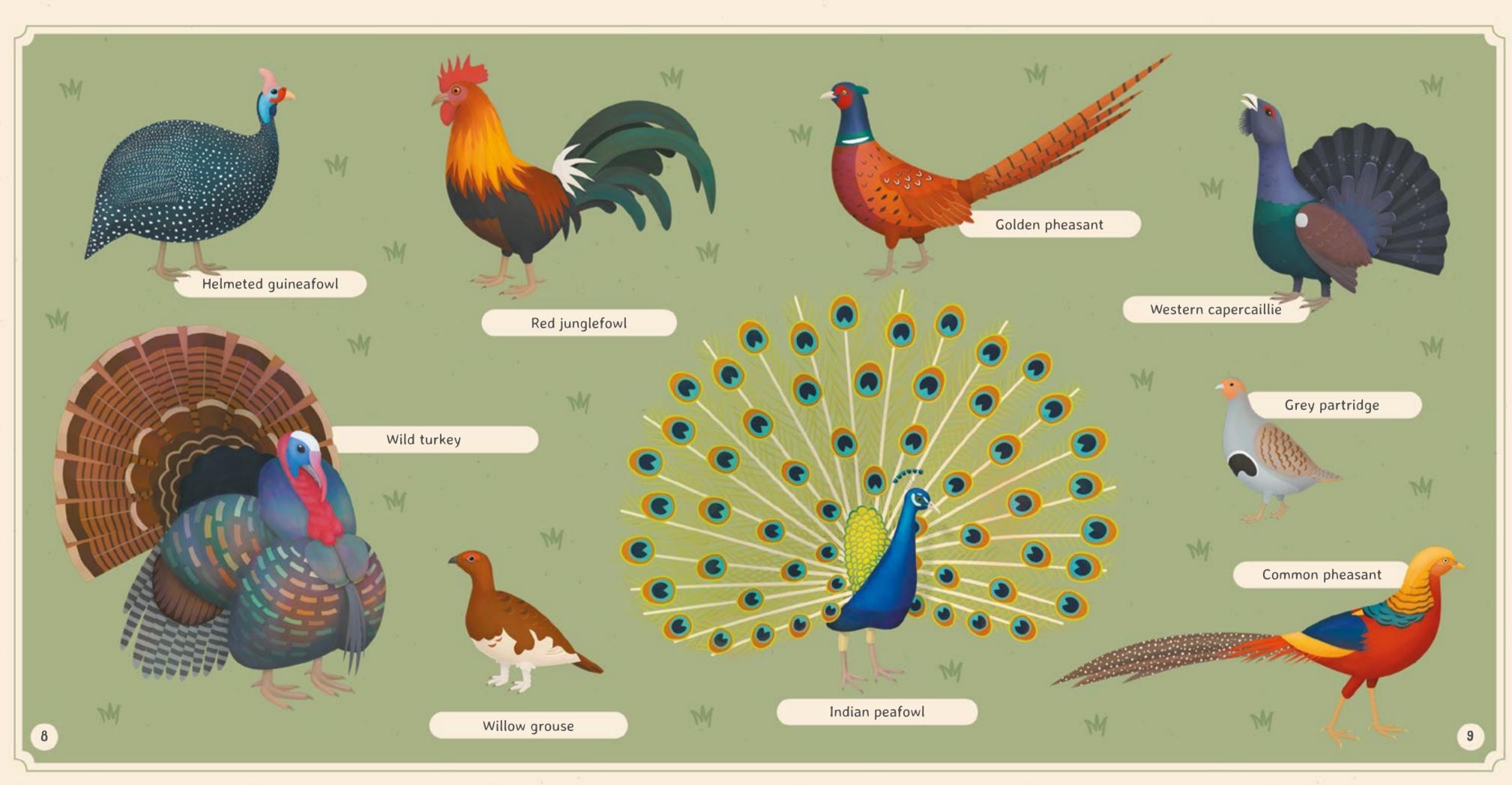
The red junglefowl, a primary ancestor of the domestic chicken, lives in the wild. The male boasts long, colorful feathers and a striking red crest on his head.

Indian peafowl

The original home of this elegant, long-trained bird is India. When courting, the male spreads out his beautiful tail feathers for the admiration of others.

Western capercaillie

This increasingly rare inhabitant of coniferous forests in Northern Europe and Russia has a diet of berries and pine needles. In the mating season the hen makes a characteristic creaking sound.



🌞 Helmeted guineafowl

As with all birds that forage for food on the ground, the stout body of the helmeted guineafowl is not made for long flights. The Ancient Egyptians kept domesticated guineafowl in their yards.

🌞 Willow grouse

The hardy willow grouse lives in cold regions of the northern hemisphere, making its nest on the ground. In anticipation of the snows of winter, it dresses in snow-white plumage.

Wild turkey

The turkey cock looks impressive, particularly when it preens and spreads its tail feathers. Although it weighs over 20 pounds, it flies to the treetops with ease.

🌞 Grey partridge

The inconspicuous partridge lives in small groups on patches of land and in fields, where it forages for grain. In their first weeks, partridge young feed mainly on insects.

Common pheasant

Although the original home of the pheasant is Asia, humans have established pheasant communities all over the world, as it is a popular game animal. It spends its days in the fields and its nights roosting in the trees.

Golden pheasant

This species of pheasant comes from China. Thanks to its vivid colors, golden crest, and striped neck, it is often kept in an aviary—a large enclosure for housing birds—as a creature of beauty.

We climb trees

Four toes—two turned forward, the other two back—are clear indications that Piciformes spend most of their time in the trees. Woodpeckers hold themselves against tree trunks using their firm tail feathers. Also characteristic of birds of this order is a strong, striking beak.

* Toco toucan

The beaks of toucans and aracaris grow to a remarkable size. Yet these beaks are so light, they are no impediment to the birds' deft flight from treetop to treetop.

****** Chestnut-eared aracari

The diet of the chestnut-eared aracari consists mainly of the fruit of tropical trees. It is found in the forest lowlands of Amazonia and in the Andes Mountains.

Emerald toucanet

The emerald toucanet lives in the mountain forests of South America, making its nests in the hollows of trees. In addition to fruit, its diet includes eggs and small animals.



* Black woodpecker

In its search for insects in the wood and under the bark of trees, the woodpecker uses its strong beak as a chisel. It is such a skilled carpenter that it digs out a cavity in the trunk to make its nest in.

Great spotted woodpecker

We hear the drumming of the great spotted woodpecker in the forests of Europe and Asia. When climbing tree trunks, they use their firm tail feathers for support.

European green woodpecker

The European green woodpecker, too, is on the team of deft climbers. It often forages for food on the ground, and we see it in gardens and parks.

Eurasian wryneck

The wryneck enjoys eating ants. Like its larger woodpecker relatives, it gathers its prey with its long, sticky tongue.

* Red-and-yellow barbet

This highly visible inhabitant of the open forest plantations of Africa likes to nest in burrows in riverbanks or termite mounds.

Bearded barbet

The striking beak of the bearded barbet has tooth-like protrusions that help it gather fruit. It is found in Africa, where there is an abundance of fig trees.

Kingfishers

We dive headlong.

We recognize the kingfisher by its large head and beak, stout body, short tail, and little legs. Most species of kingfisher live in warm regions of Africa and Asia. Some excel as hunters of fish and as headlong divers.

* Common kingfisher

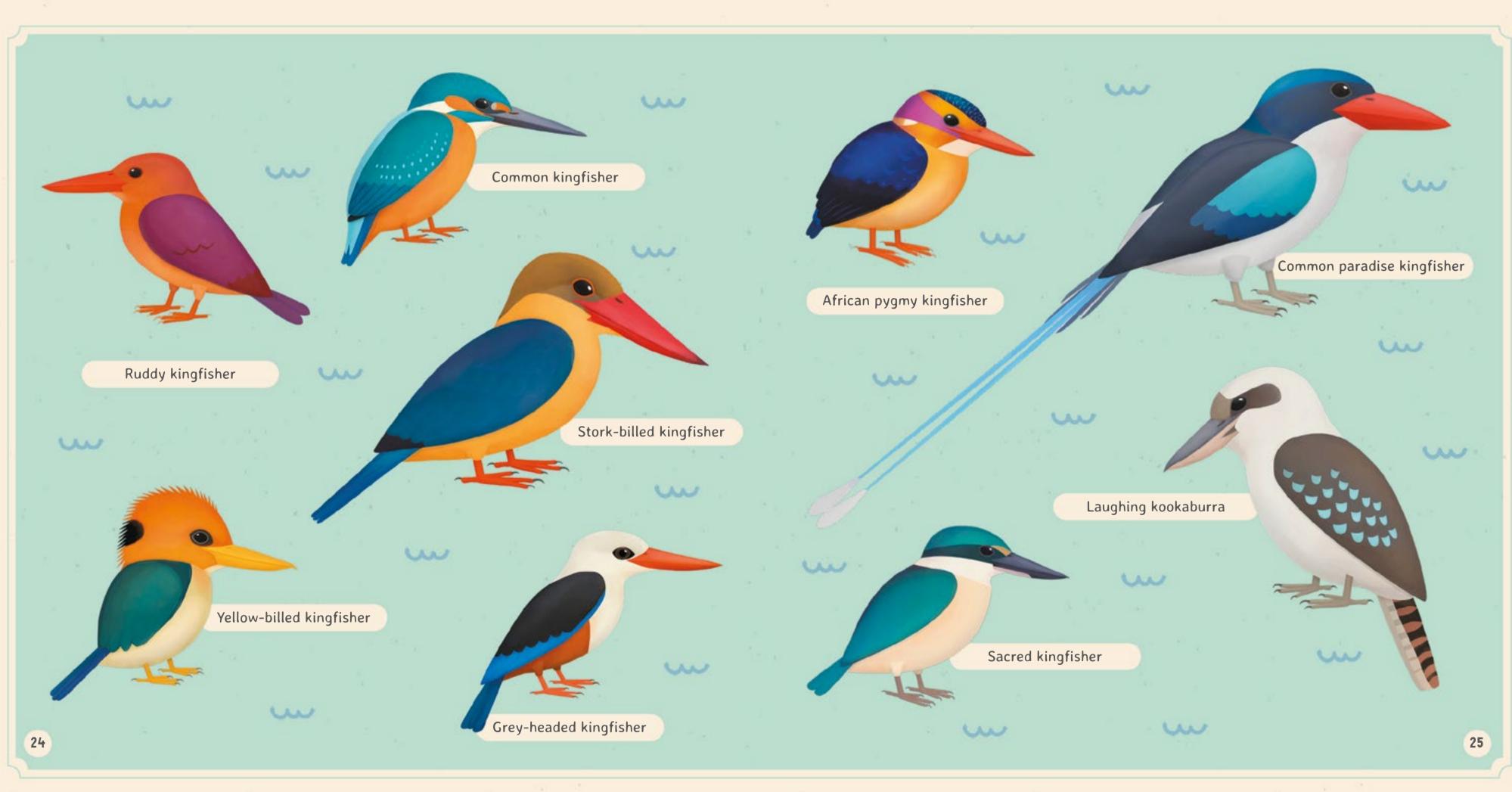
Found in Europe, the beautifully colored kingfisher resembles a flying gemstone. It lies in wait for its fish prey on a branch overlooking flowing water.

Laughing kookaburra

This robust kingfisher from Australia is very popular. It lives in a tight family group. Its loud call sounds like laughter.

Common paradise kingfisher

It lives in the primeval forests of New Guinea, where it hunts invertebrates on the ground. It nests in termite nests in trees.



** Stork-billed kingfisher

With its remarkably large beak, this kingfisher dares to defend its territory against large predators. It inhabits the forests of India and Southeast Asia.

* Ruddy kingfisher

The ruddy kingfisher adjusts its diet to suit its habitat. When near water, it favors fish. Otherwise, it makes do with frogs, lizards, and insects.

* Yellow-billed kingfisher

The yellow-billed kingfisher in our picture is obviously upset. We know this because its feathers are standing up. It lies in wait for small prey in the treetops.

****** Grey-headed kingfisher

It lives in forests and scrublands in Africa, feeding mainly on insects. It nests in holes in steep riverbanks.

* Sacred kingfisher

In the past, Polynesians considered this kingfisher sacred, believing it could control the waves. It is widespread in Australia and New Zealand.

* African pygmy kingfisher

This tiny African kingfisher is about five inches long. It nests in holes in the riverbank or in termite nests.

Penguins

We fly underwater.

A penguin's wings aren't big enough to lift its stout body off the ground. But it is remarkably well equipped for underwater swimming.

On the shore, penguins look amusingly clumsy. Underwater, however, they turn into graceful and fast swimmers.

King penguin

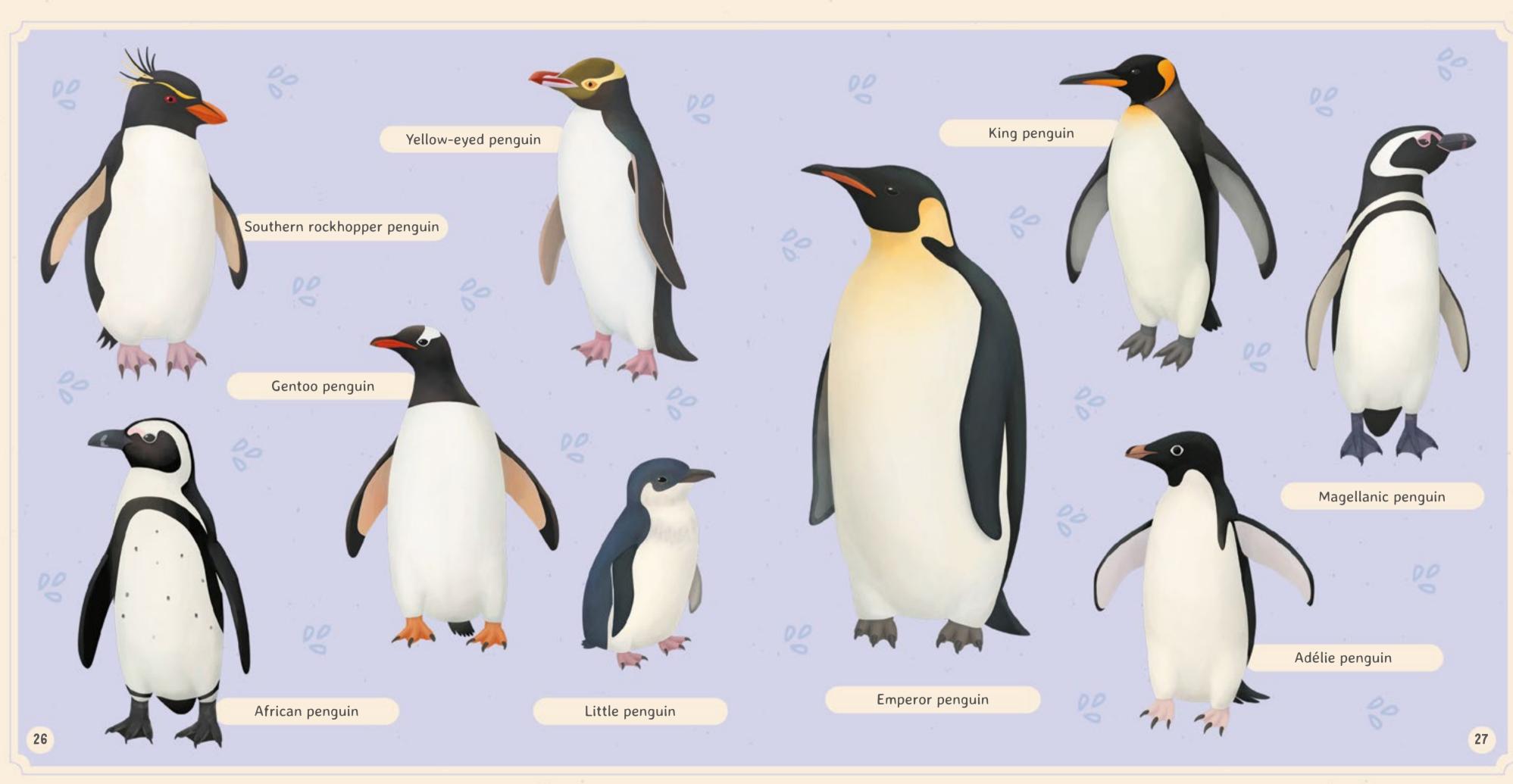
All species of penguin live in the southern hemisphere. The king penguin nests on islands in huge colonies. It feeds on fish and cephalopods.

Emperor penguin

The largest of the penguins is not put off by the extreme cold of Antarctica. It can stay underwater for 20 minutes and dive to a depth of over 1,600 feet.

* Adélie penguin

This strong swimmer with a great sense of direction lives in Antarctica. When walking on ice, it sometimes makes things easier for itself by sliding on its belly.



Southern rockhopper penguin

It uses its powerful claws to climb the super-steep cliffs, where it makes its nest. It jumps from rock to rock with surprising agility.

African penguin

Not all penguins put up with biting cold and snow. This species chooses to nest on the beaches of Africa.

Gentoo penguin

At home on the Antarctic Peninsula and on islands in the cool waters of the southern hemisphere, it lunches on krill that's comprised of small crustaceans and fish.

Little penguin

The smallest of the penguins raises its young in burrows on the seashores of Australia and New Zealand. On land, it ventures out only at night.

Yellow-eyed penguin

On land, this very rare New Zealand species of penguin hides in dense vegetation. It is distinguished by its yellow eyes ringed with golden-yellow feathers.

Magellanic penguin

This jacketed penguin with two black stripes—under its throat and on its chest—inhabits the cold shores of South America. The skin around its eyes and beak is pink.

