

1. WHITE-TAILED HAWK

Length: 44–60 cm (1.4–2 feet)
Lifespan: 10–15 years

2. SCARLET MACAW

Length: around 81 cm
(2.7 feet)
Lifespan: 40–50 years

3. HARPY EAGLE

Length: around 1 m
(3.2 feet)
Lifespan: 25–35 years

4. KING VULTURE

Length: 67–81 cm (2–2.7 feet)
Lifespan: 20–25 years

5. HUMMINGBIRD

Species shown: T. colombica
Length: 5–13 cm (2–5 inches)
Lifespan: 3–7 years

6. BLACK-AND-WHITE OWL

Length: 35–40 cm (1–1.3 feet)
Lifespan: 20 years

HIGH FLYERS

THE EMERGENT LAYER OF THE AMAZON RAINFOREST IS HOME TO MANY SPECIES OF BIRDS. AT THIS LEVEL, THEY HAVE PLENTY OF SPACE TO ROAM THE FOREST, SWOOPING TO FEED ON PREY OR VEGETATION, AND THEIR NESTS ARE LESS VULNERABLE TO PREDATORS THAN THEY WOULD BE LOWER DOWN. THE APEX PREDATORS OF THIS LAYER ARE THE HARPY EAGLE AND THE WHITE-TAILED HAWK.

- 1 WHITE-TAILED HAWK** This bird of prey likes to hunt in the emergent layer, where there are fewer trees than below to hinder its flight. It hovers in the air, scanning its surroundings, before swooping for its prey. It eats small mammals and reptiles, as well as birds and insects.
- 2 SCARLET MACAW** These large, colourful parrots live in the emergent layer and upper canopy. Here they have the space to fly at speeds of up to 56 km/h (35 mp/h). They mostly fly alone or in pairs, but sometimes as a flock. They feed on fruits and seeds.
- 3 HARPY EAGLE** These huge, fearsome raptors have wingspans of up to 2 m (6.6 feet), and 13-cm (5 inch) claws – longer than a grizzly bear's. They nest high up in kapok trees and prey on sloths and monkeys, in addition to other mammals, reptiles and birds.
- 4 KING VULTURE** These large scavenging birds have very sharp eyesight. They perch in the topmost branches of the emergent layer and search for carrion (animal remains) below. If they see any, they swoop down in groups of up to twelve and push other scavengers aside to get at the food.
- 5 HUMMINGBIRD** This family of birds are amazing flyers. They can hover in mid-air, fly backwards and even upside down. Beating their wings at up to a 100 times a second, they dart from flower to flower among the treetops of the emergent layer, drinking nectar and eating insects.
- 6 BLACK-AND-WHITE OWL** This bird of prey hunts at night for large insects, as well as bats, rodents, birds and tree frogs. It builds its nest in the emergent layer to protect its eggs and chicks from climbing predators.





1. TOUCAN

Species shown: *R. sulfuratus*
Length: 29–63 cm (0.9–2 feet)
(bill: 19 cm / 7.5 inches)
Lifespan: 20–25 years

2. PARROT

Species shown: *A. festiva*
Length: 25–100 cm
(9.8 inches–3.3 feet)
Lifespan: 5–75 years

3. PARADISE TANAGER

Length: 13.5–15 cm (5–6 inches)
Weight: 17–23 g (0.6–0.8 ounces)

5. RESPLENDENT QUETZAL

Length: 36–40 cm
(1.2–1.3 feet)
(tail: 65 cm / 2.1 feet)
Lifespan: 8–10 years

6. BLUE COTINGA

Length: 18–22 cm
(7–9 inches)
Weight: 76 g (2.7 ounces)

4. JACAMAR

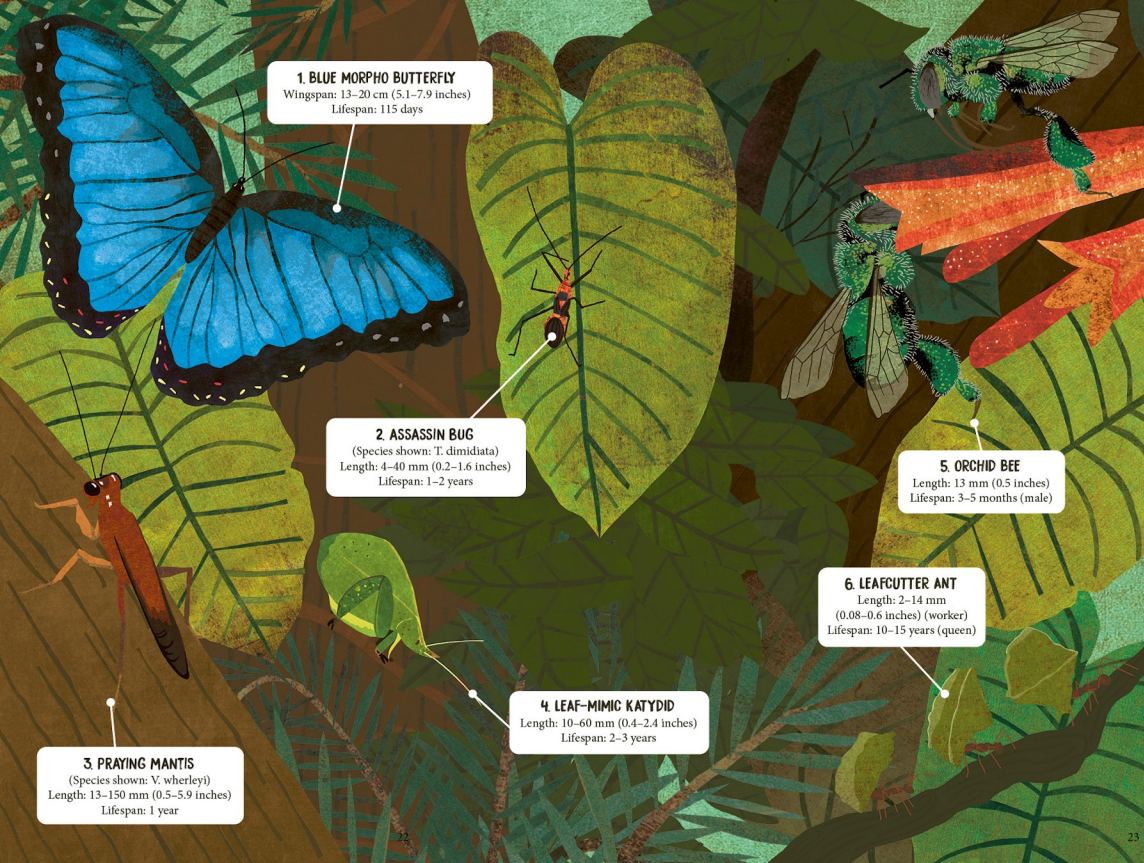
Species shown: *G. ruficauda*
Length: 14–34 cm (0.5–1.1 feet)
Weight: 17–75 g (0.6–2.6 ounces)

BIRDS IN THE BRANCHES

MANY BIRD SPECIES ARE ATTRACTED TO THE RAINFOREST CANOPY BECAUSE FOOD IS PLENTIFUL AND THEY HAVE SOME SHELTER FROM THE WEATHER. BIRDS HERE TEND TO HAVE LOUD CALLS, SO THEY CAN COMMUNICATE WITH EACH OTHER THROUGH THE DENSE FOLIAGE. SOME SPECIES HAVE A COLOURFUL PLUMAGE TO ATTRACT MATES.

- 1 TOUCAN** This family of birds are famous for their huge bills, which they use to pluck fruit from trees, as well as for grabbing insects, frogs and other small prey. Toucans rarely fly very far, and often simply glide between branches with their short wings.
- 2 PARROT** The Amazon rainforest is home to many parrot species. All have an upright posture, usually colourful feathers and a curved bill. Their long, sharp claws – two facing forward and two back – are used for climbing and manipulating food.
- 3 PARADISE TANAGER** This colourful songbird has a plumage containing seven separate hues. It spends most of its life in the upper canopy, occasionally moving lower to forage for fruit and insects.
- 4 JACAMAR** This group of birds perch on branches in the canopy or near forest streams, hunting for insects – often butterflies or dragonflies – which they snatch in mid-air with their long, sharp bills. Their plumage is bright and often iridescent.
- 5 RESPLENDENT QUETZAL** This beautiful bird has a green body and red breast, and the male has an amazingly long tail. Its feathers are shiny and green like canopy leaves, camouflaging it from predators, which is necessary because it is not a strong flyer.
- 6 BLUE COTINGA** This plump, dove-like bird feeds mainly on fruit. The male is bright blue and the female is dark brown. The male often perches motionless, high in the canopy, where his brilliant plumage camouflages him against the sky above, making him invisible to predators.





1. BLUE MORPHO BUTTERFLY

Wingspan: 13–20 cm (5.1–7.9 inches)

Lifespan: 115 days

2. ASSASSIN BUG

(Species shown: *T. dimidiata*)

Length: 4–40 mm (0.2–1.6 inches)

Lifespan: 1–2 years

3. PRAYING MANTIS

(Species shown: *V. wherleyi*)

Length: 13–150 mm (0.5–5.9 inches)

Lifespan: 1 year

4. LEAF-MIMIC KATYDID

Length: 10–60 mm (0.4–2.4 inches)

Lifespan: 2–3 years

6. LEAFCUTTER ANT

Length: 2–14 mm

(0.08–0.6 inches) (worker)

Lifespan: 10–15 years (queen)

5. ORCHID BEE

Length: 13 mm (0.5 inches)

Lifespan: 3–5 months (male)

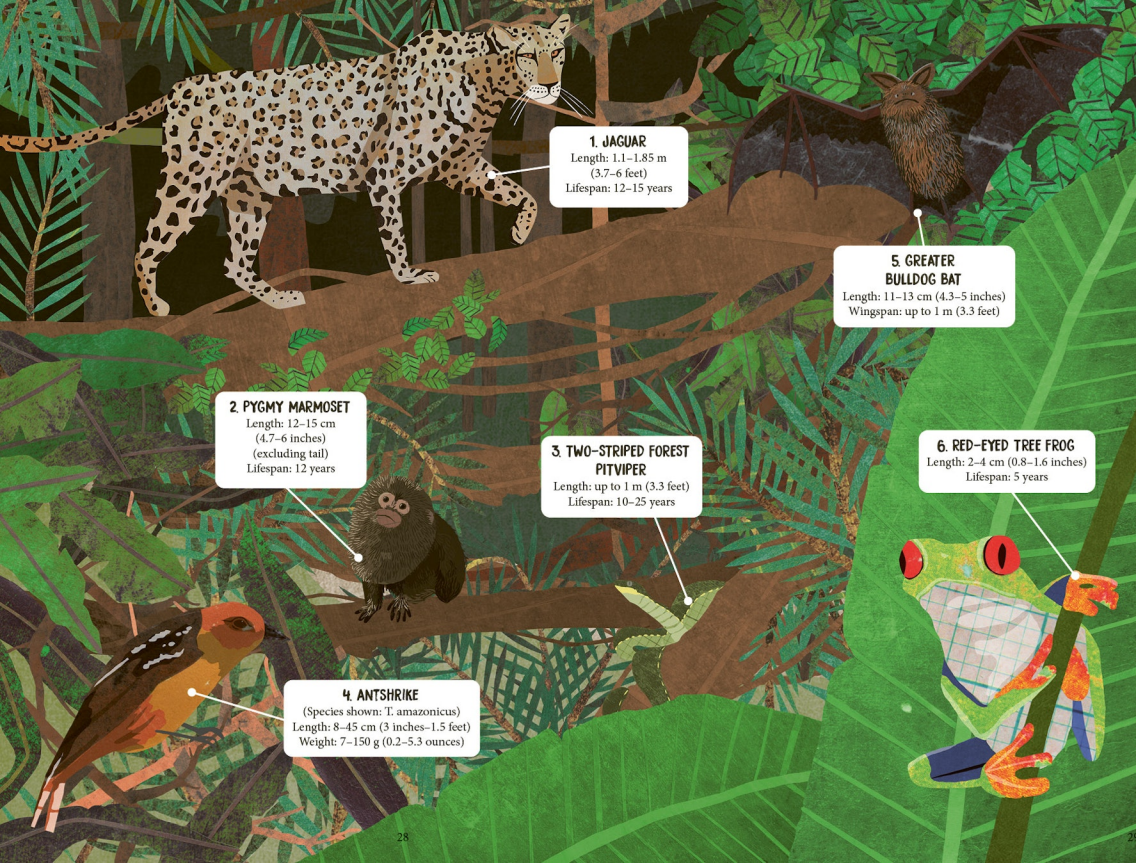
BUGS IN THE TREES

AN ESTIMATED 2.5 MILLION SPECIES OF INSECT LIVE IN THE AMAZON RAINFOREST, AND THE GREATEST NUMBER OF THEM CAN BE FOUND IN THE CANOPY. AROUND 700 SPECIES OF BEETLE WERE FOUND ON JUST ONE TREE! TROPICAL RAINFOREST INSECTS TEND TO BE LARGER AND MORE COLOURFUL THAN THOSE FOUND IN OTHER HABITATS

- 1. BLUE MORPHO BUTTERFLY** Its brilliant blue wings, when flashed, can startle other animals. While at rest, the butterfly shows the dull brown underside of the wings, camouflaging it. As a caterpillar, it releases a nasty-smelling oil that deters predators.
- 2. ASSASSIN BUG** This large family of insects kill ants and suck them dry, then attach the corpse to their body to disguise both their look and smell. These clever bugs also coat their legs with tree sap, making them sticky, then grab bees out of mid-air.
- 3. PRAYING MANTIS** This group of insects can turn their head 180 degrees to scan their surroundings with their 5 eyes. Their green or brown bodies are well camouflaged. Their front legs are armed with spikes and they can snatch prey with super-quick reflexes.
- 4. LEAF-MIMIC KATYDID** These insects have evolved the perfect disguise for canopy life: they look exactly like leaves. What's more, each individual looks slightly different, so their monkey predators must look very carefully at the leaves to find the insect hidden there.
- 5. ORCHID BEE** These bees are recognisable by their colourful metallic bodies. They are attracted to the scents of the orchid flowers that grow in the forest canopy, and many orchid species depend on these bees for pollination.
- 6. LEAFCUTTER ANT** These ants place leaves in their underground nests. As the leaves decay, a fungus grows on them, which the ants eat. The colony divides up jobs, with different ants cutting and carrying the leaves, defending the nest and farming the fungus.

ANIMALS

MANY SPECIES OF BAT, MONKEY SNAKE, LIZARD, INSECT AND FROG LIVE IN THE UNDERSTOREY. THE DIM LIGHT KEEPS THEM HIDDEN, AND MANY ARE WELL CAMOUFLAGED. THE BROWN VINE SNAKE, FOR EXAMPLE, IMITATES A TREE BRANCH, AND OWL BUTTERFLIES MIMIC OWL EYES TO KEEP PREDATORS AT BAY.



1. JAGUAR
Length: 1.1–1.85 m
(3.7–6 feet)
Lifespan: 12–15 years

5. GREATER BULLDOG BAT
Length: 11–13 cm (4.3–5 inches)
Wingspan: up to 1 m (3.3 feet)

2. PYGMY MARMOSET
Length: 12–15 cm
(4.7–6 inches)
(excluding tail)
Lifespan: 12 years

3. TWO-STRIPED FOREST PITVIPER
Length: up to 1 m (3.3 feet)
Lifespan: 10–25 years

4. ANTSHRIKE
(Species shown: *T. amazonicus*)
Length: 8–45 cm (3 inches–1.5 feet)
Weight: 7–150 g (0.2–5.3 ounces)

6. RED-EYED TREE FROG
Length: 2–4 cm (0.8–1.6 inches)
Lifespan: 5 years

- 1. JAGUAR** The jaguar, apex predator of the lower rainforest, is an excellent climber and swimmer with powerful jaws capable of crushing the skulls of its prey. It's also well camouflaged, its fur covered in rosettes resembling leaves or light specks in the dappled understory light.
- 2. PYGMY MARMOSET** The world's smallest monkey lives in the understory and feeds on gum secreted by the trees. Its head can rotate 180 degrees to keep watch for predators, and it has sharp, claw-like nails for clinging to branches. It can leap up to 5 metres (16.4 feet).
- 3. TWO-STRIPED FOREST PITVIPER** This snake lives in the shrubs, palms and trees of the understory, near streams and forest clearings. It anchors itself to branches with its prehensile tail, and ambushes prey such as mice, birds, lizards and frogs.
- 4. ANTSHRIKE** This group of birds make their nests in the understory and eat insects by snatching them from the air or swooping to forage for them on the forest floor. Some antshrikes follow swarms of army ants and catch the insects fleeing from them.
- 5. GREATER BULLDOG BAT** This large bat hunts at night by echolocation. It eats insects, but also scoops fish from rivers with its sharp claws. It finds them by detecting ripples on the water surface. During the day it roosts in tree hollows.
- 6. RED-EYED TREE FROG** These frogs live in the trees of the understory near water sources where they raise their young. They spend their days camouflaged on the underside of a leaf. At night they hunt for insects, which they catch with their long, sticky tongues.

