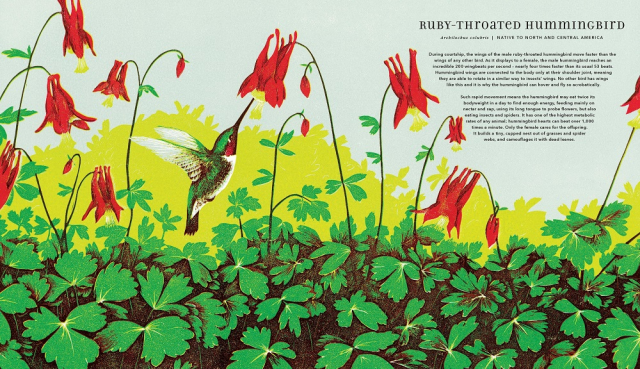


## RUBY-THROATED HUMMINGBIRD

*Archilochus colubris* | NATIVE TO NORTH AND CENTRAL AMERICA

During courtship, the wings of the male ruby-throated hummingbird move faster than the wings of any other bird. As it displays to a female, the male hummingbird reaches an incredible 200 wingbeats per second - nearly four times faster than its usual 53 beats. Hummingbird wings are connected to the body only at their shoulder joint, meaning they are able to rotate in a similar way to insects' wings. No other bird has wings like this and it is why the hummingbird can hover and fly so acrobatically.

Such rapid movement means the hummingbird may eat twice its bodyweight in a day to find enough energy, feeding mainly on nectar and sap, using its long tongue to probe flowers, but also eating insects and spiders. It has one of the highest metabolic rates of any animal; hummingbird hearts can beat over 1,800 times a minute. Only the female cares for the offspring. It builds a tiny, cupped nest out of grasses and spider webs, and camouflages it with dead leaves.





## emperor penguin

*Apelodytes forsteri* | NATIVE TO ANTARCTICA

In the frozen Antarctic, where the temperature can drop to  $-40^{\circ}\text{C}$ , extraordinary parenting is needed to keep emperor penguin chicks alive. Once the female has laid her egg, she passes care of it to the male and leaves to hunt. She often has to travel many kilometers to reach the edge of the ice pack and her ocean hunting grounds, where she is able to dive deeper than any other bird - over 160 meters - to catch fish, krill and squid.

While she is away the male balances the egg on his feet, protecting it from the elements under a brood pouch and huddling with other penguins to conserve heat. For two months, the male eats nothing, and may lose almost half his bodyweight. When the chick hatches, its father can produce a kind of milk from his oesophagus to feed it. When the female returns, she regurgitates food for the chick and takes over its care, leaving the male free to hunt. Once the chick is old enough to survive outside the brood pouch it joins a crèche of up to several thousand other juveniles.

Eventually the whole colony will trek to the ocean together.