

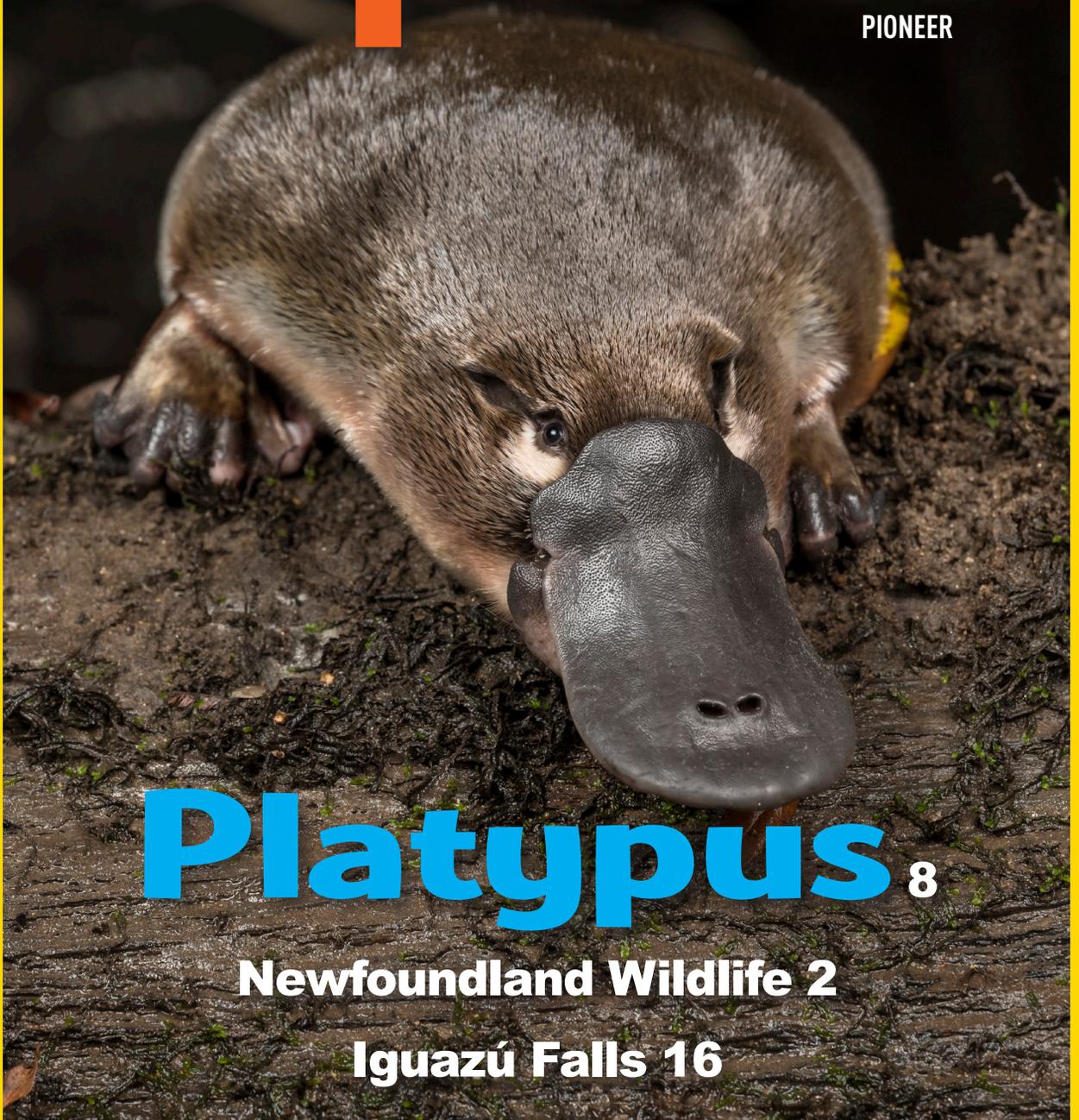


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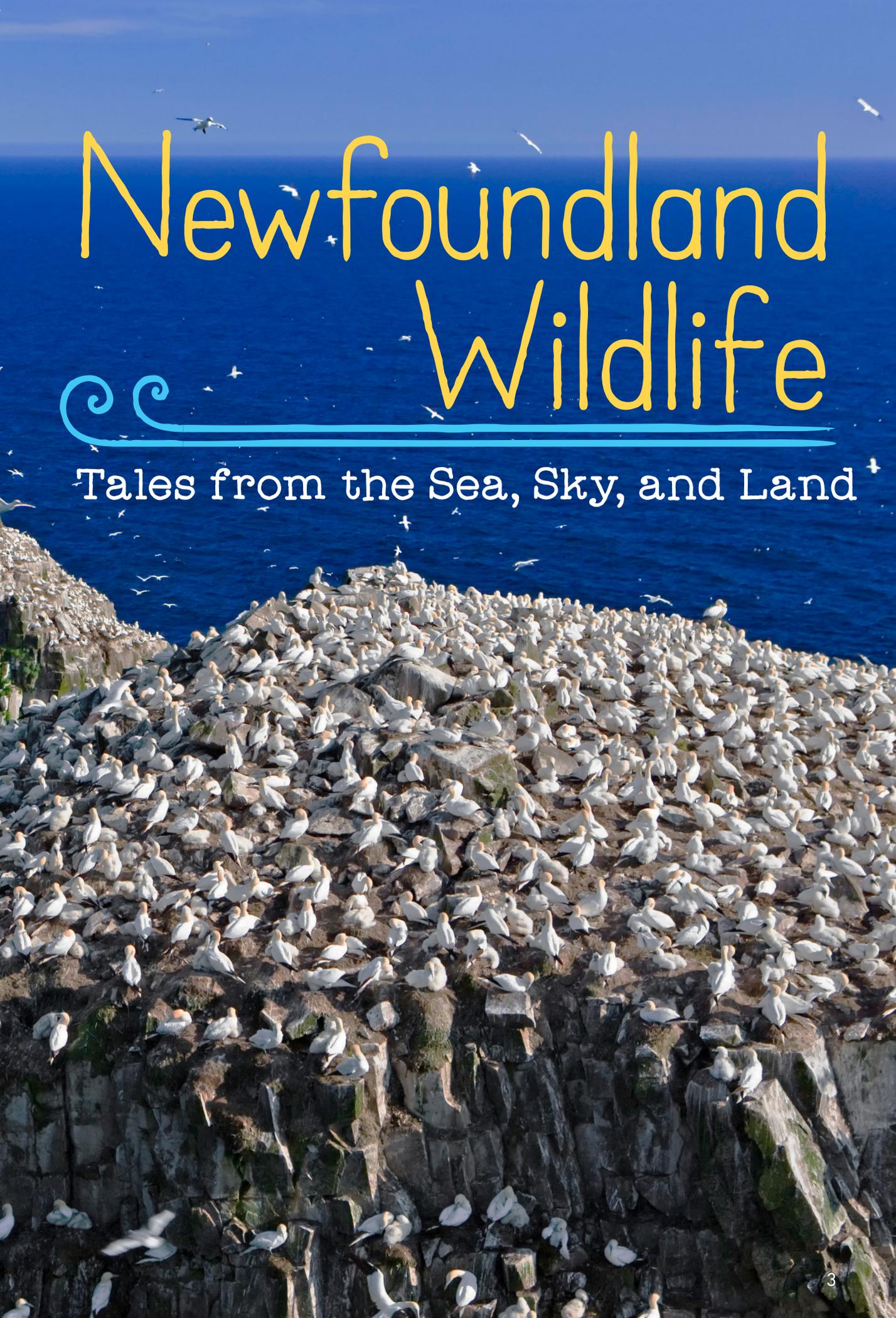
Wildlife and Wild Places

BIODIVERSITY AND HUMANS

As you read, think about how many different kinds of living things exist in an area.



by Justine Ammendolia

A large colony of white seabirds, likely gannets, is perched on a rocky cliff overlooking the ocean. The birds are densely packed on the cliff face, which is covered in dark, jagged rocks. The ocean is a deep blue, and the sky is a clear, bright blue. Several birds are also seen flying in the sky. The overall scene is a vibrant and natural depiction of wildlife in its habitat.

Newfoundland Wildlife

Tales from the Sea, Sky, and Land

Caribou do not live in the ocean. I know that! I'm a marine biologist. I study ocean animals. Caribou are land animals. Yet, where I live, animals from the sea, the sky, and the land can be seen in the same place.

I live on an island called Newfoundland. It's in Canada. I was visiting a lighthouse one day and nearly walked into a herd of caribou. This was big news! Caribou are hard to see in the wild. They stay away from people.

I got out my camera and took as many photos as I could. I love to see how all animals live on and around the island.

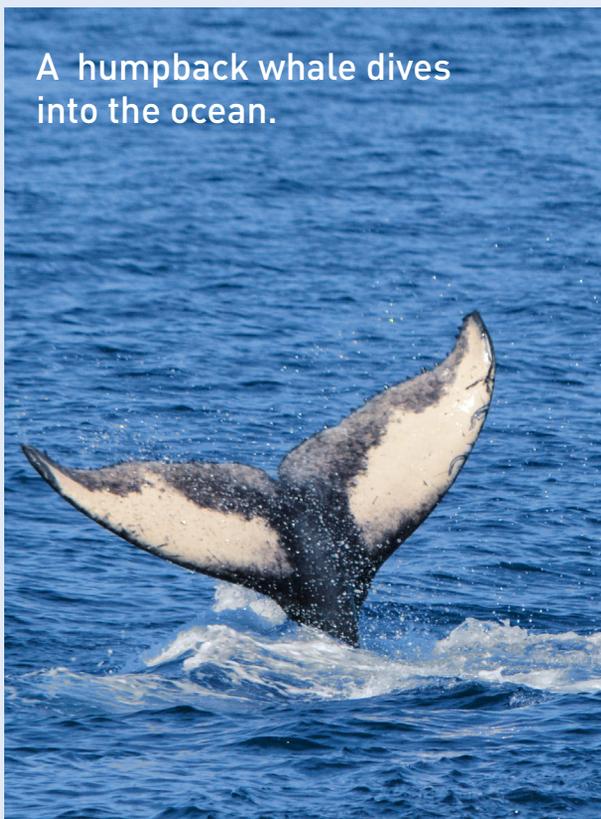


The Sea

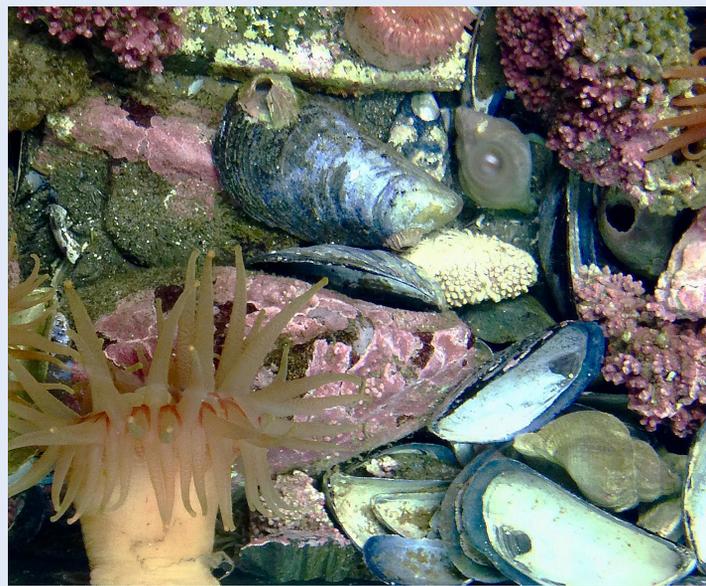
I know sea animals best. Sea anemones live on the seafloor here. They have squishy bodies. They glue themselves to rocks to stay in place. Their long tentacles sting and grab passing prey.

Tiny fish called capelin swim by. Capelins arrive by the millions. They “jump” onto rocky beaches to lay their eggs. They stay away from the anemones. Yet, they can’t stay away from the humpback whales.

The whales travel to Newfoundland in the summer. They are looking to eat capelins. When the whales come close to the shore, you can spot their fins. Sometimes, you can catch sight of a whale tail before it dives.



A humpback whale dives into the ocean.



The waters around Newfoundland are full of anemones and other life.

The Sky

I'm not always looking down into the water, though. The skies above are filled with seabirds. They live in large groups.

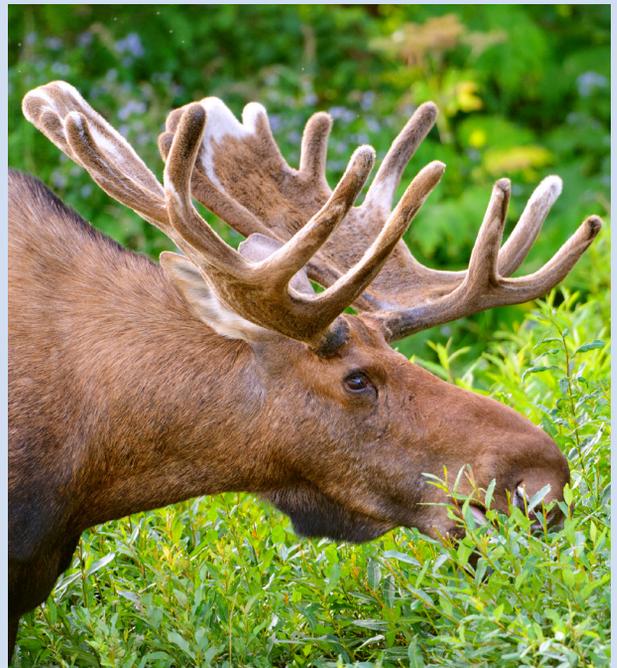
Puffins are the best known here. They are strong fliers. They also swim well. They take to the sky. Then they dive down into the water to get their fill of fish.

The Land

Newfoundland also has its share of moose. They didn't come from here, however. People brought these animals to the island long ago. They **adapted** to live here. But now, they eat too many native plants. It's a problem!



Puffins are a familiar sight.



Moose often eat native plants.

The Full Picture

I study life in the sea. Why is it important for a scientist like me to pay attention to land and sky creatures? I've learned that all of the living things in an **ecosystem** rely on each other. The birds in the sky need the fish in the ocean to survive. Land animals need plants and other animals to eat.

As a scientist, it's important to **observe** all parts of an ecosystem. Take a look around you. Think about our world. Then we can start to see how everything fits together.

WORDWISE

adapt: to change your behavior so that it is easier to live in a particular place

ecosystem: all living and nonliving things that exist in an environment

observe: to look at something or someone carefully

The sea, sky, and land are filled with life!

With the **bill** of a duck,
the **bones** of a lizard,
the **feet** of a pelican,
the **tail** of a beaver,
and the **coat** of an otter,
this egg-laying mammal
is full of surprises.

By Lynn Brunelle



Wildlife and Wild Places

LIFE SCIENCE

As you read, think about
how the platypus survives
in its environment.

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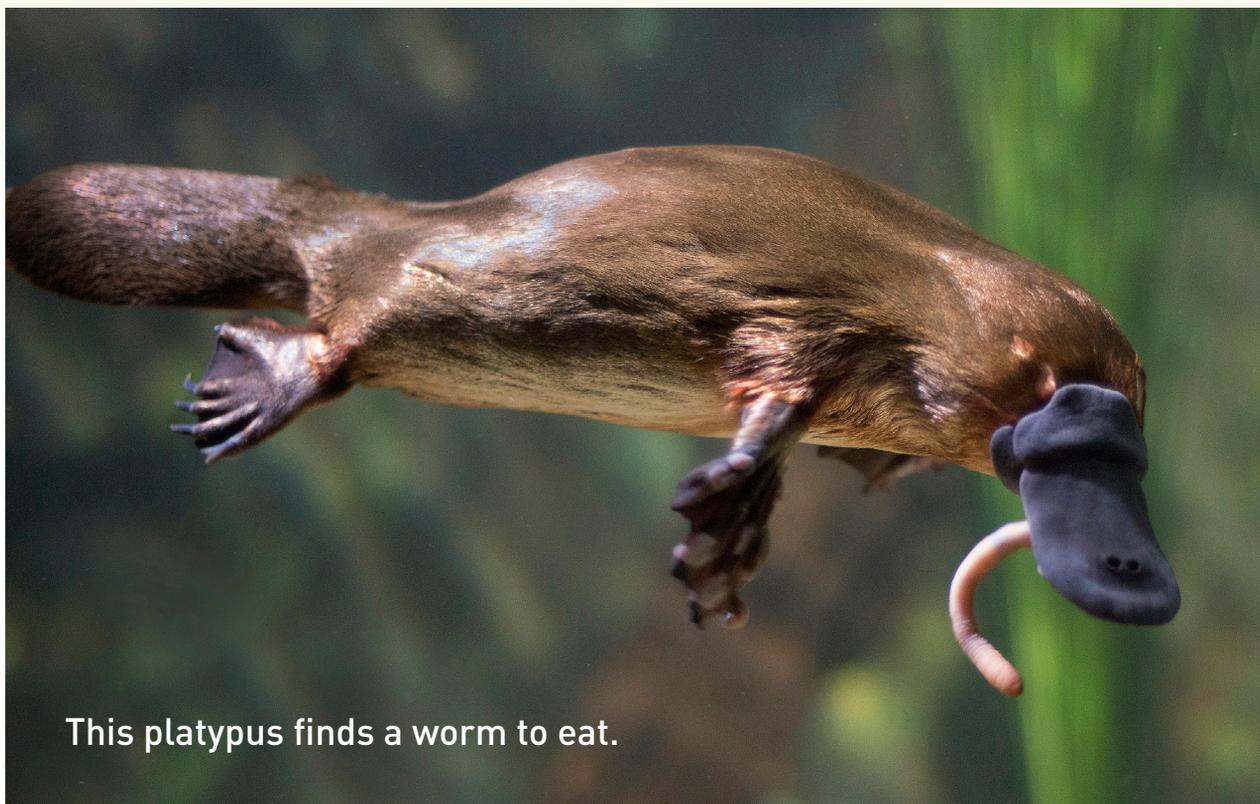


h
ammal

A worm wriggles on the bottom of the river. It hides under a pile of rocks. Near the riverbank, a web-footed hunter comes out of its den. It's hungry. It dives into the water.

The worm can't hide. The hunter picks up on its movements. It finds the worm easily and snaps it up.

This predator is a platypus. It is an unusual **mammal**. Its strange combination of features helps it survive in its environment.



This platypus finds a worm to eat.

Platypus Parenting

A platypus paddles to the riverbank. She uses her webbed front feet. On land, she waddles to her den. Deep inside her den, she digs a new chamber with her claws. There, she lays two small eggs. She warms them with her body.

Two weeks later, the eggs hatch. The bean-size babies are hairless and blind. They are also hungry. The mother platypus feeds them milk from folds in her skin. When they can swim and eat by themselves, they are ready for life on their own.



Platypus eggs are small.



Platypuses live in burrows.

All in the Family

Platypuses are found only in Australia. They are part of a group called **monotremes**. These are mammals that lay eggs.

Millions of years ago, there were a few species of reptile-like mammals. They had fur. They nursed their babies like mammals. They had bird beaks. They were shaped like lizards. Like lizards and birds, they also laid eggs. Over time, most egg-laying mammals died off. Today, only two remain: the platypus and the echidna.

Platypuses are found only in Australia.

The platypus looks like it has a duck's bill.



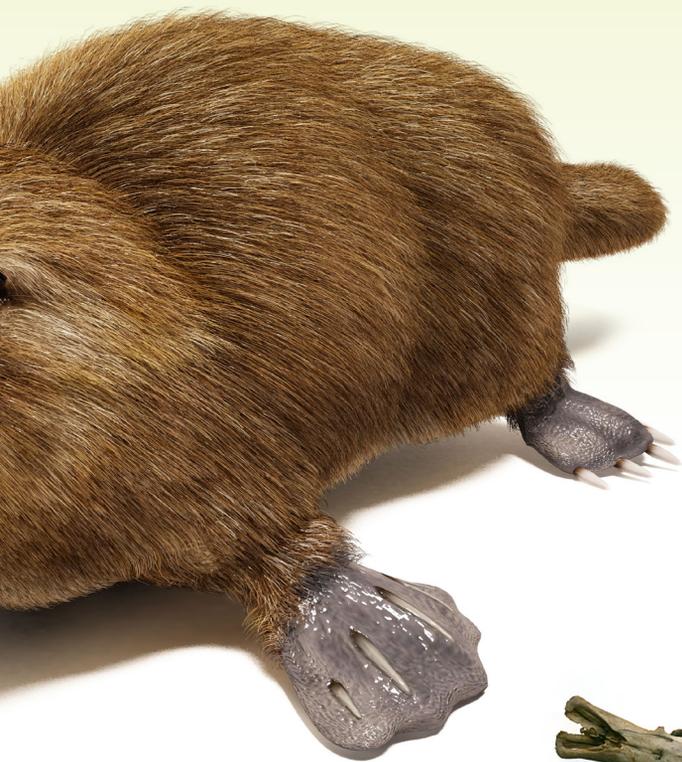
■ platypus range



Funny Face

A platypus has the face of a duck. Its bill is soft. It's lined with nerves. They help the platypus feel its way around underwater. Its bill can sense movement from other animals.

A platypus has no teeth. Yet, it can still crunch up food. It scoops up small rocks with its meals. Then it grinds everything together. The rocks crush the food. The platypus swallows the food but spits out the rocks.



Webbed toes help push the platypus through the water.



The platypus's tail helps it swim. It also stores fat.



The platypus's skeleton is like a lizard's.



front foot

The platypus's feet help it on land and in water.



Lighter fur on its eyelids make this platypus's eyes seem to glow when closed underwater.



In Water, On Land

A platypus is built for both land and water. Its front feet are webbed. When it spreads its toes, its foot becomes a paddle. It paddles through the water. When it swims, its back feet help it steer and brake.

On land, it can use its front claws to dig. Its back feet help it climb on land. Male platypuses have hollow spikes in their back feet. They are filled with a venom. The platypuses use these when they fight other platypuses.

Tail and Eyes

Do you know what the platypus's tail is for? It's a storage tank! It holds body fat. This fat gets used up when food is scarce.

On land, a platypus uses its eyes to spot predators. In water, it closes its eyes tightly to keep the water out. How does it hunt? It uses its other senses to find prey.

It may seem like the platypus has some odd parts. But, this mishmash mammal is a survival success story!

Male platypuses have spikes on their back heels.



WORDWISE

mammal: an animal that breathes air, has a backbone, and grows hair; female mammals can produce milk

monotreme: a mammal that lays eggs and also feeds its babies with milk



The Wonder of

As you read, think about how long it took for the falls to form and how water changed the land.

the Falls



Travel to South America to see one of the natural wonders of the world.

By Libby Romero



In the rainforest, I could hear the roar from the Devil's Throat.

I moved to the edge of the footbridge. Looking over, I could see the giant waterfall.

The mighty Iguazú River fell over the rocky cliff. It was beautiful.

Great Water

Its name says it all. Iguazú means “great water.” It is one of the largest water systems in the world. The falls span the borders of Argentina and Brazil. During the rainy season, up to 275 different waterfalls can form.

Most of the falls are on the Argentina side of the river. I raced up the river in a speedboat. The boat slowed at the foot of several waterfalls. I got a good view!



Legend of the Falls

A legend tells how the falls came to be. Long ago, a serpent god lived in the river. He was angry. A young woman named Naipi was in love with the warrior, Tarobá. She and Tarobá tried to run away. The serpent god saw them. He split the earth, creating the Devil's Throat. He turned Naipi into a rock. He turned Tarobá into a tree on the other side. Now, they can only meet over a rainbow.



Eruption and Erosion

Science tells a different story. Long ago, the land here broke apart. This caused lava to pour from volcanoes. The lava built up layers of rock.

As the rock cooled, **faults**, or cracks, appeared. Water running down the faults **eroded**, or wore away, the land.

Two riverbeds formed. Falls formed at the place where these two rivers met. As water fell into the rivers, it **weathered** away rock on the bottom. The upper layers crumbled. Today, the falls look like a staircase.



Into the Rainforest

Water is just part of the beauty of the falls. This place is also home to many species. Plants. Mammals. Birds. Reptiles. Amphibians. Some species are found nowhere else in the world.

As I walked through the rainforest, I saw tall palm trees and even taller rosewoods. I saw fruit hanging from small trees.

Butterflies fluttered through the air. I also saw a toucan in flight and monkeys in the trees. I got a good view of a young caiman. And coatis seemed to be everywhere! They look like raccoons. I kept an eye out for jaguars. They live here, too.



toucan

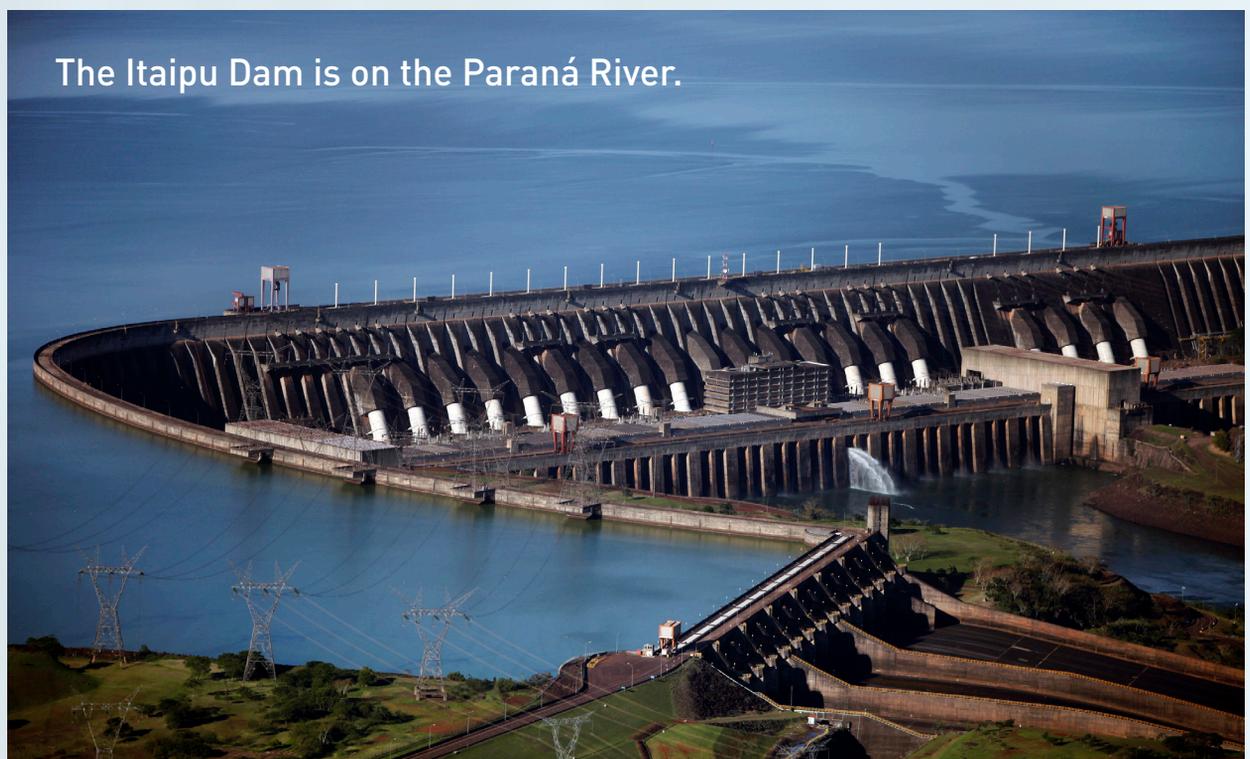
black capuchin monkey

Trouble in Paradise

People want to protect the parks near the falls. Yet, people are its biggest problem. Poachers come into the parks illegally. They take trees and animals. People accidentally injure or kill animals while driving through the parks.

Outside the parks, logging and clearing land for farms is a problem. When trees disappear, plants and animals lose their homes. Some species go extinct.

Water sources are affected, too. Building dams supplies electricity to the area. But, the dams also affect the water level in the rivers.



Working Together

Protecting this place is hard. The falls border three countries. Each country has its own ideas on how to manage the land. They are trying to work together.

They are starting with the animals. For example, jaguars used to be in trouble. Farmers killed them because the big cats hurt their cattle. Now, the farmers plant corn instead of raising cattle. The number of jaguars has doubled!

Ideas to make the parks better are working. The beautiful falls are worth seeing. And, they are worth fighting for.



WORDWISE

erode: when rocks and sediments are picked up and moved to another place by ice, water, wind, or gravity

fault: a crack in Earth's crust

weather: when rocks are broken down by the sun, wind, or rain over a long period of time

Jaguars are making a comeback in this region.

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Cover: a platypus

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