

Backpack



Bear's



Reptiles, Amphibians, & Fish Book

The "cold-blooded" vertebrates

Written by Alice O. Shepard



What does this iguana have in common with a frog and a fish?
You'll learn the answer in this book!

BOOK
3

Animal Kingdom Series Book 3

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Backpack Bear's

Reptiles, Amphibians, & Fish Book

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Vertebrates



Mammals

Birds

“Warm-Blooded”*

*“Warm-blooded” animals can maintain a fairly constant body temperature.

(Animals with Backbones)



Reptiles

Amphibians

Fish

“Cold-Blooded”*

There are five kinds of vertebrates. Two of these are “warm-blooded,” and three are **“cold-blooded.”**

This book is about Reptiles, Amphibians, and Fish.



*“Cold-blooded” animals generally are not able to maintain a constant body temperature. Their body temperature changes depending on their surroundings.

What do a sea turtle, a frog, and a clownfish have in common? All of these animals have backbones and are “cold-blooded.”

“Cold-blooded” animals generally can not make their own body heat. When it is cold outside, their bodies are cold. When it is warm, their bodies are warm.

“Cold-Blooded” Vertebrates





Sea Turtle Eggs and Hatchlings

Most “cold-blooded” animals lay many eggs. Some lay millions! Why do they do this? These animals do not usually care for their babies. They lay their eggs in a hidden place and leave them.

When the babies hatch, they must survive on their own. Some are eaten by predators. Some can not find food or shelter. Only a few of the strongest babies live to become adults.

Now, what is *different* about a sea turtle, a frog, and a clownfish?
That's what this book is about!

Each of these animals belongs to a different animal group.
A sea turtle is a **reptile**, a frog is an **amphibian**, and a clownfish
is a **fish**.



Reptile



Amphibian



Fish

They are
"cold-blooded"
vertebrates!





Galapagos Iguana

Reptiles

Turtles, lizards, snakes, crocodiles, and alligators are reptiles. Reptiles have tough scaly skin. Reptiles breathe with their lungs throughout their lives.

Reptiles can be found everywhere on Earth except very cold places.



Galapagos Marine Iguana



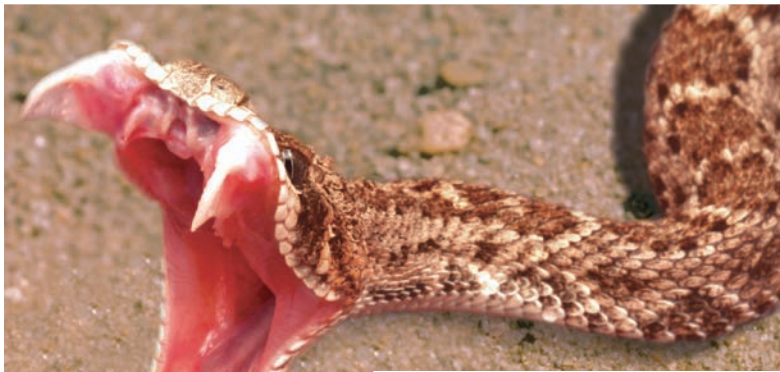
Giant Tortoise



Green Tree Viper

Which of these animals are reptiles? That's right, all of them!

Most reptiles have four legs and clawed feet. Snakes do not have any legs or feet, but they are still reptiles.



Diamondback Rattlesnake



Boa Constrictor



Alligator

Some reptiles catch their prey with their sharp claws and teeth. Some reptiles have a **venomous** bite. Others wrap themselves around their prey and squeeze them. These reptiles can be dangerous.



Most reptiles are not dangerous, and they are fun to watch.

Gila Monster Lizard



Galapagos Land Iguana

Reptiles must also protect themselves from predators.

Reptiles are able to hold very, very still. They are hard to see because they are often camouflaged.

Some lizards escape from predators by breaking off their own tails. A new one will grow back in its place.

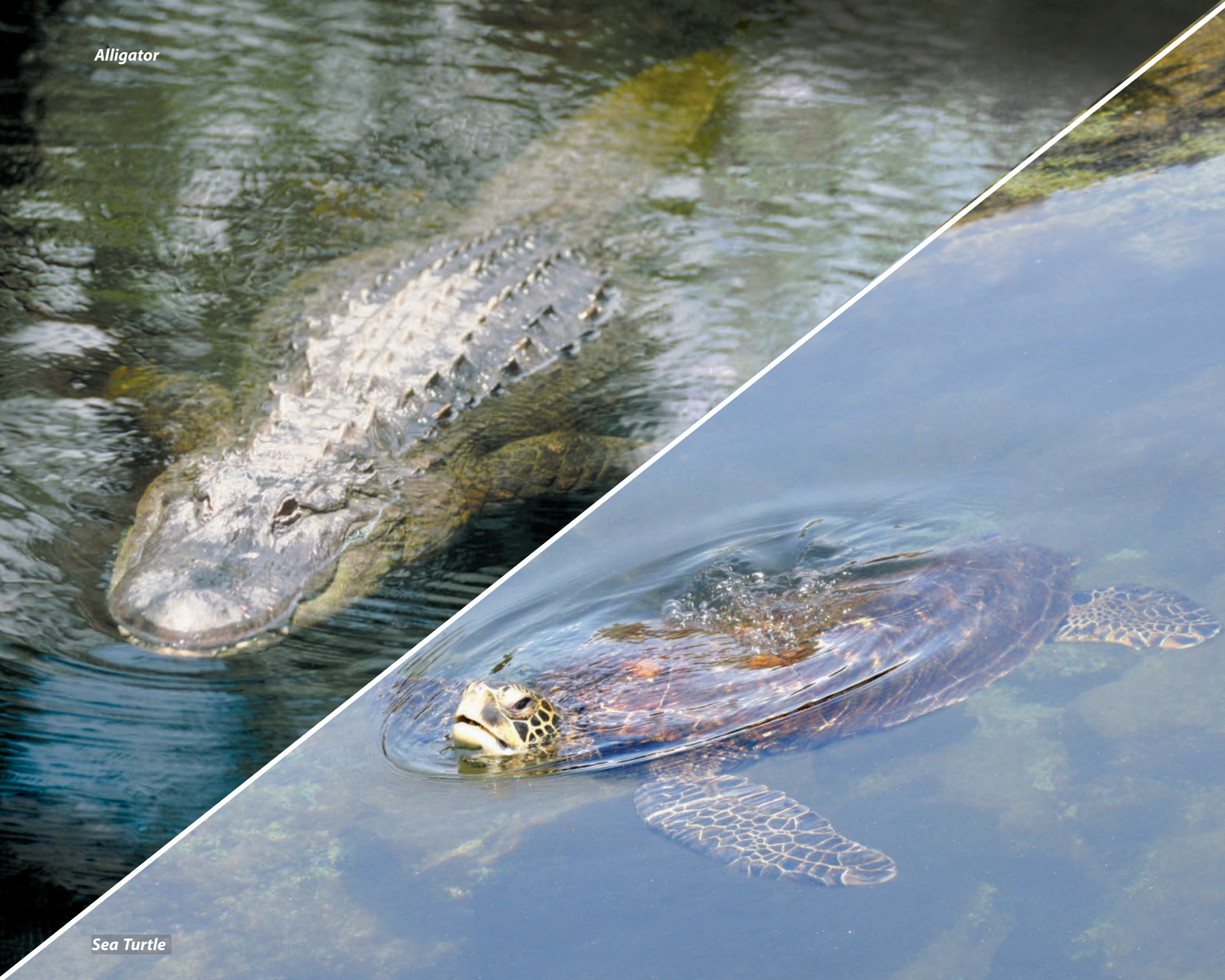
Most reptiles live on land. A few, such as alligators, crocodiles, and some turtles, live in the water.

These reptiles can stay underwater a long time, but must come up to the surface to breathe air with their lungs.



I breathe air with my lungs, too!

Alligator



Sea Turtle



Amphibians

The word amphibian means “two lives.” Most amphibians begin their lives underwater, breathing with gills. As they grow, their bodies change. They develop lungs so they can live on land.

Frogs, toads, and salamanders are amphibians. Amphibians have **porous** skin. This means they can breathe air through their skin as well as their lungs! They can also drink water through their skin.

Amphibians do not have scales.

Frogs and toads are the most common amphibians.

A toad is a kind of frog with very bumpy skin and shorter legs. Toads often live on the land.

Frog



Toad



Another type of amphibian is a salamander. A salamander looks something like a small lizard but it is not a lizard. Remember, a salamander does not have scales.

Many salamanders can do something incredible. If they lose one of their limbs, they can grow a new one!



Salamander



Some frogs have webbed feet so they can swim fast.

Other frogs have sticky pads on their feet. These amphibians can climb up trees, hang upside-down, and hold on tight!



Metamorphosis of a Frog



Frog Eggs



Tadpoles



Tadpole with Legs




Frog

Most amphibian mothers lay their eggs underwater. Some lay over a thousand eggs at a time.

Tadpoles hatch from the eggs. Tadpoles have gills and tails. They look like fish! Tadpoles swim around looking for food.

As tadpoles grow, their bodies change.

They grow legs for walking. They develop lungs for breathing. Their tails shrink away. Now, they look like their parents. This cycle of life is called ***metamorphosis***.



A teddy bear is an eating machine!



Leopard Frog

Most adult amphibians live in or near water or moist places. They can not let their skin get too dry. When the weather becomes dry, some amphibians burrow into the mud and wait for rain.

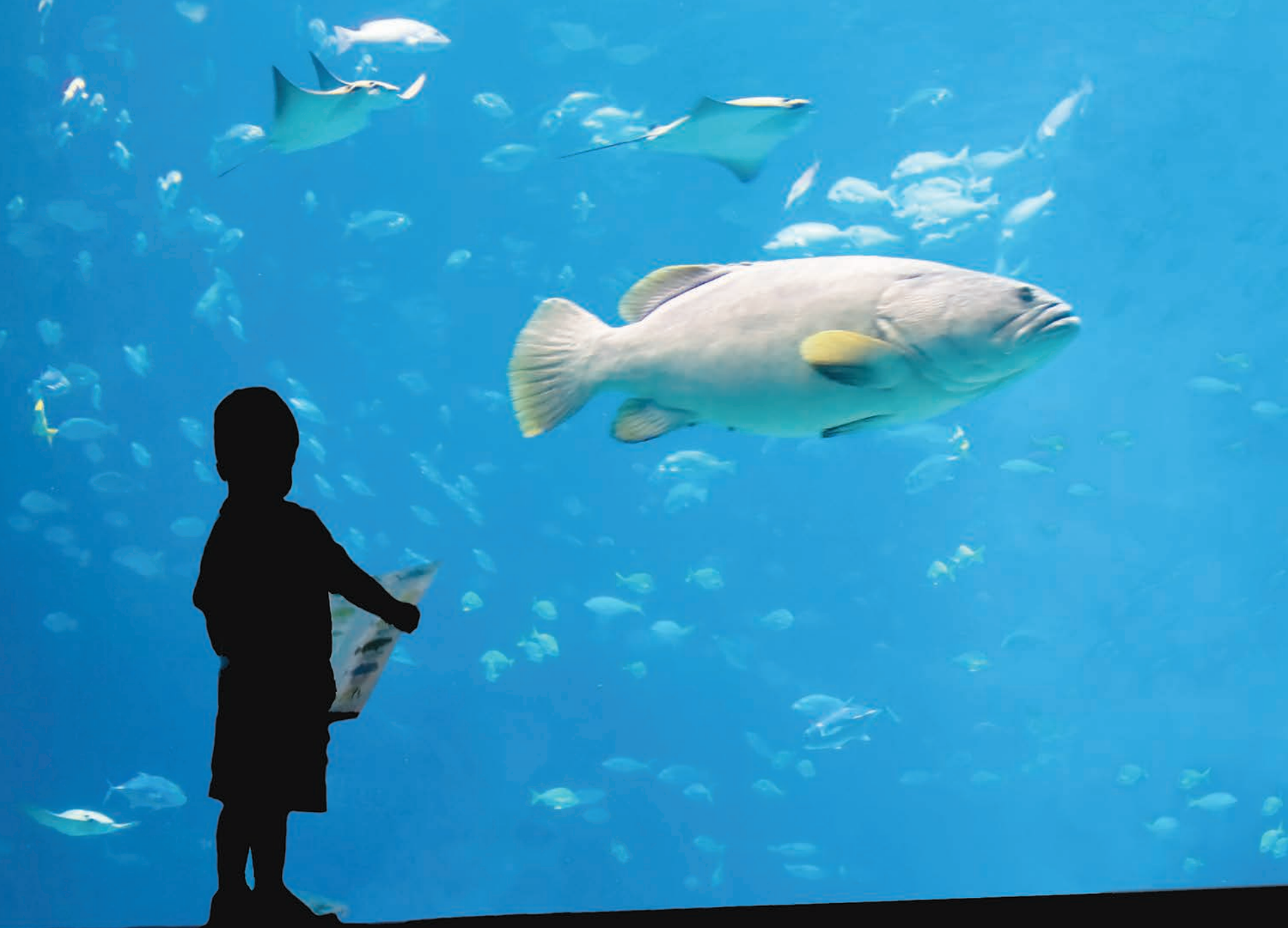




Camouflaged Toad

Many amphibians are camouflaged to protect themselves from predators. But not all frogs hide to stay safe! Brightly colored frogs are often poisonous. Predators know to leave these frogs alone when they see them!



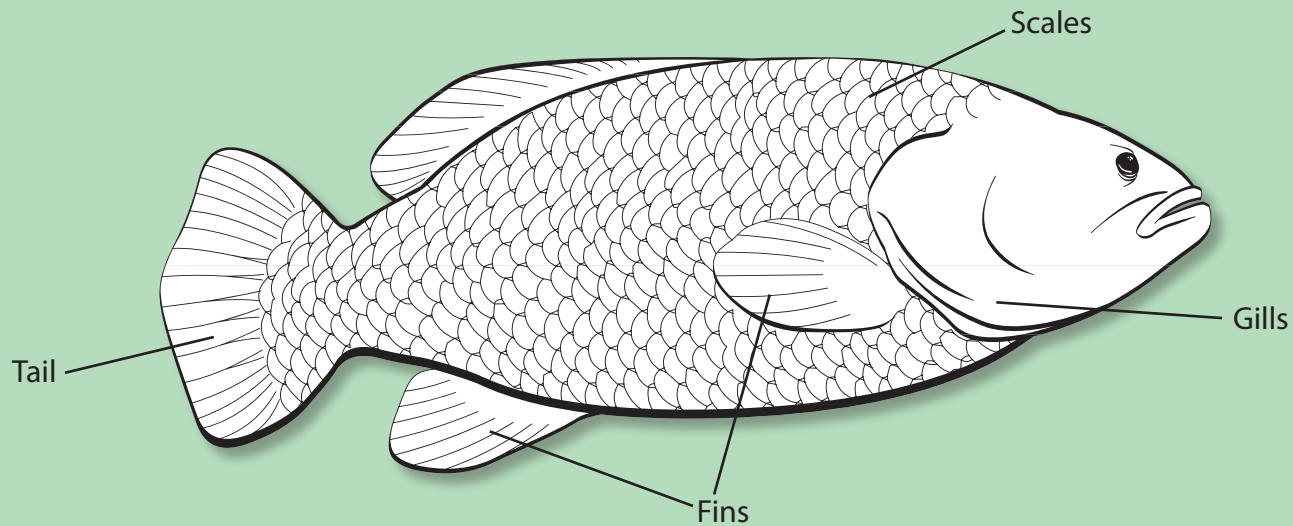


Fish

Fish live under the water. They breathe the air in the water using their gills.

Fish have lived in the ocean since before the time of the dinosaurs.

Most fish are covered with scales, and have fins and a tail.





Orange-Striped Triggerfish



Honeycombed Cowfish

There are more than thirty thousand different kinds of fish. Some are very unusual looking!



Grouper



Seahorse



Butterfly Fish



Trunk Fish

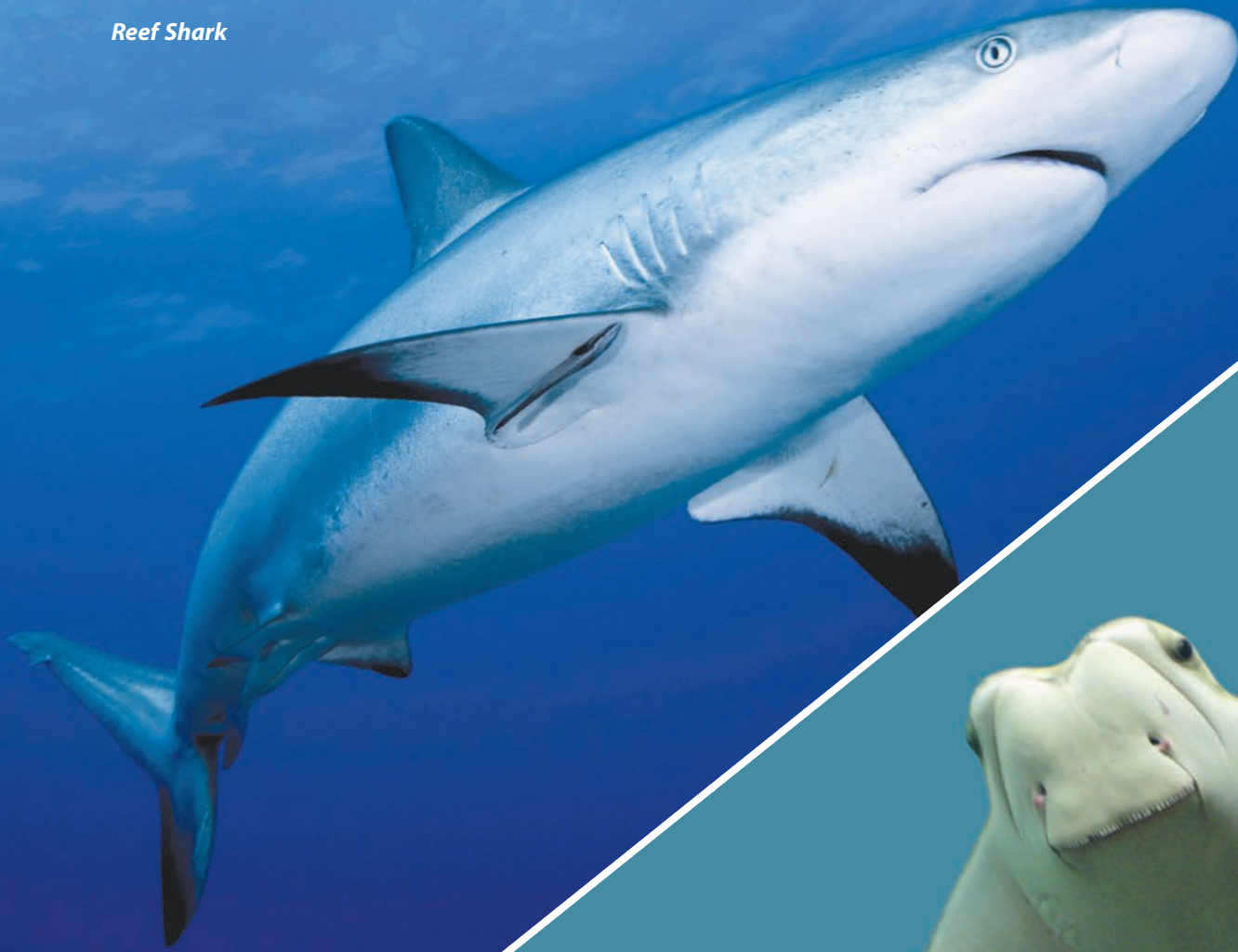


Lion Fish

Sharks are predators. They belong to a group of fish without hard bones. Their bones are made of ***cartilage***. Cartilage bends more easily than bone. Sharks can make quick turns as they hunt for their prey.

Many sharks do not lay eggs. Their babies are born strong and ready to take care of themselves.

Reef Shark



Stingray



Fish protect themselves from predators by hiding under rocks or in plants. Some stay together in groups for protection. We call each group a ***school of fish***.



School of Fish



Endangered Sea Turtle



Endangered Pine Barrens Tree Frog



Endangered Sawfish

Summing it up!

Many reptiles, amphibians, and fish are now ***endangered***. This means they are disappearing from the world. It is often caused by over-hunting, pollution, and loss of habitat.

To keep these animals safe, it is up to us to protect the environment.

Glossary

Amphibian: A “cold-blooded” vertebrate that is able to breathe through its soft skin and generally lives in water during early life and on land as an adult

Cartilage: Strong but flexible bone-like material found in some parts of the body

“Cold-Blooded”: An animal that generally cannot make its own body heat and whose body temperature tends to be controlled by its environment

Endangered: Describes a type of animal or plant that has become very rare and could die out completely because of changes in its environment

Fish: A “cold-blooded” vertebrate that lives in the water all its life, and breathes air with its gills

Metamorphosis: A major change in the form of some animals that happens as the animal becomes an adult

Porous: The ability to let air or water through

Reptile: A “cold-blooded” vertebrate with tough, scaly skin

School of Fish: A group of fish that swim together

Tadpole: A tailed fish-like stage in the life cycle of an amphibian

Venomous: Refers to an animal whose bite injects venom into its prey. Venom is like a poison, and can harm or kill another animal



Not all tough, scaly skin is the same!

Reptiles have tough, scaly skin, but that doesn't mean the skin of each animal looks the same.

Can you see the difference in the scales of these reptiles?

◀ *Iguana with very bumpy scales on its head.*



▲ *Tortoise with flat scales on its legs.*



▲ *Lizard with overlapping scales.*

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About the Author

There are very few reptiles in England, so few in fact that author Alice O. Shepard never saw a reptile until she moved to the United States. The first reptile she saw was a lizard in her mother’s garden. Alice was hanging clothes on the clothesline and felt like she was being watched. Sure enough, a lizard was looking right at her. Do you know what she did? She looked right back!

Acknowledgements

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