

# Otters: River or Sea?

A Compare and Contrast Book



by Cathleen McConnell

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## A Compare and Contrast Book

Perhaps you've seen an otter swimming and playing at a zoo or aquarium, but do you know how do these amazing animals live in the wild? Most are found in freshwater habitats, while others make their home in coastal kelp forests or can be found feeding along rocky shores. There are many similarities between river otters and sea otters, but there are also vast differences. Explore fascinating facts about these playful, aquatic mammals, meet the species, and awe at adorable photos in this latest installment of the Compare and Contrast Book series.

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- Otter Math
- Adaptations
- Fun Facts
- Otter Enrichment at Zoos and Aquariums

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Thanks to Lesley Wright of the International Union for Conservation of Nature (IUCN) Otter Specialists Group for verifying the accuracy of the information in this book.

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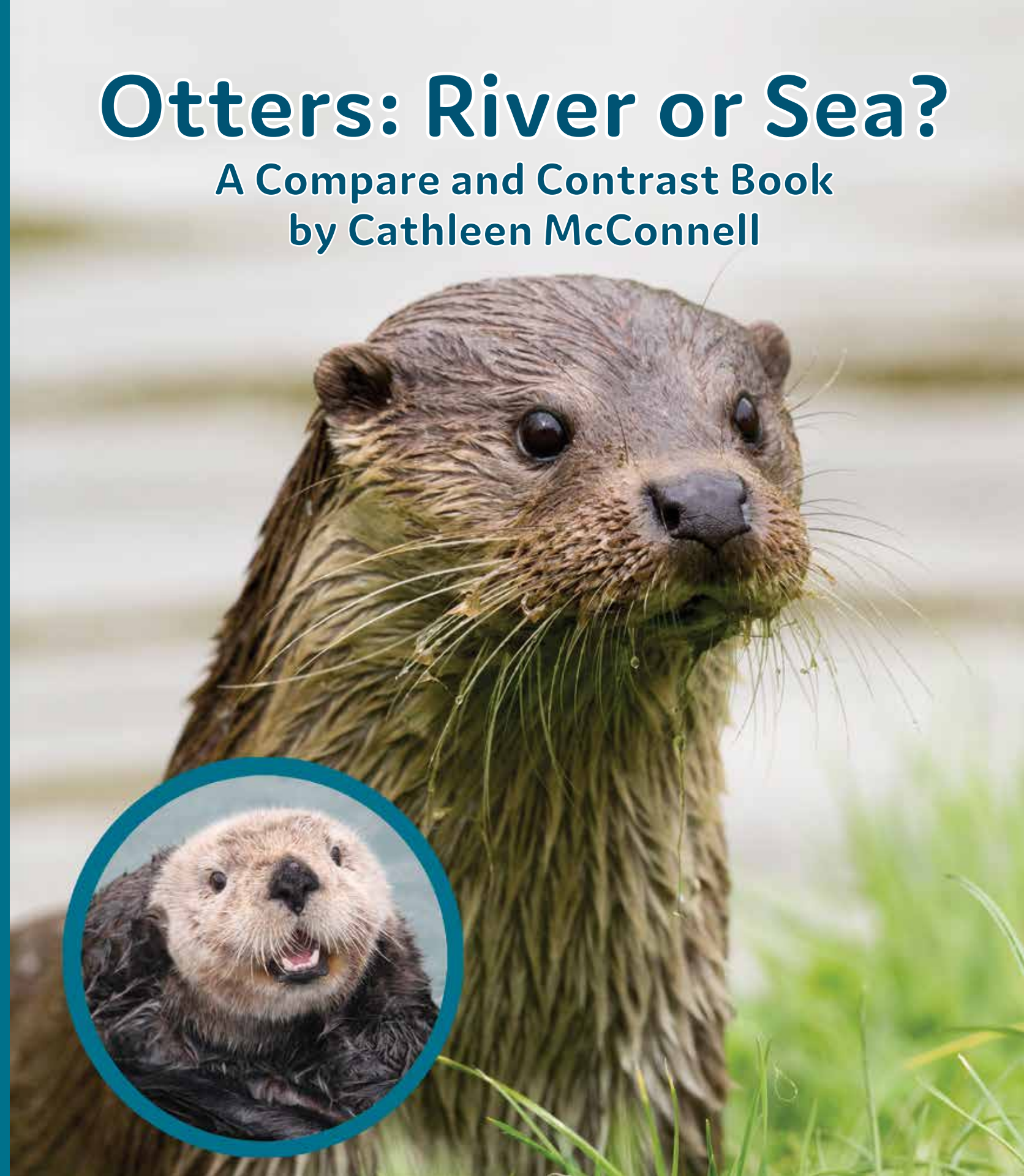
**Cathleen McConnell** loves all animals—especially those that live in the ocean. She fell in love with sea otters while volunteering at the Oregon Coast Aquarium shortly after it opened. Having the opportunity to share her excitement for otters and other marine life with visitors is what inspired her to pursue a career in zoo and aquarium education. Currently, as part of her job with the Conservation Engagement team at the Point Defiance Zoo & Aquarium, Cathleen runs all kinds of family programs including day camps and “Zoo Snooze” overnight experiences. Over the years she has taught countless children about the wonders of wildlife when they have visited on field trips, or as part of an outreach program at their school. Although she has developed curriculum and provided professional development for teachers, this is her first book. She hopes that it will get kids excited to learn more about animals and how each is uniquely adapted to survive in their natural environment. Cathleen lives in Washington state with her three cats and two guinea pigs. When she can, she also fosters guinea pigs in need of adoption through a local rescue group.



Cathleen McConnell

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Otters are mustelids. Mustelids have long bodies, short legs, round ears, and thick fur. Other members of the mustelid family include skunks, badgers, ferrets, fishers, and wolverines.



**ferret**



**skunk**



**fisher**



**badgers**



**wolverine**

There are 13 species of otters. Most are river otters that live near water but spend much of their time on land.

One type of river otter, the marine otter, is found along the Pacific coast of South America. These otters may swim in the ocean briefly to hunt.



Neotropical Otter  
*Lontra longicaudis*



North American River Otter  
*Lontra canadensis*



Smooth Coated Otter  
*Lutrogale perspicillata*



African Clawless Otter  
*Aonyx capensis*



Asian Small-Clawed Otter  
*Aonyx cinereus*



Congo Clawless Otter  
*Aonyx congicus*



Southern River Otter  
*Lontra provocax*



Spotted-Necked Otter  
*Lutra maculicollis*



Marine Otter  
*Lontra felina*



Eurasian Otter  
*Lutra lutra*



Giant Otter  
*Pteronura brasiliensis*



Hairy Nosed Otter  
*Lutra sumatrana*



Sea Otter  
*Enhydra lutris*

Sea otters are the only otters that are truly adapted to the marine environment. They can sleep, eat, mate, and give birth, without ever coming to shore.

*What can the name of some of the species tell you about that animal?*



River otters live near a variety of aquatic habitats including rivers, ponds, lakes, and even the ocean. They move well on land and in water. When a predator approaches on land, a river otter rushes to the water to escape.



Sea otters live in the Pacific Ocean. They are often seen floating on their backs, sometimes wrapped in kelp.

Sea otters completely depend on the sea for their survival.



# For Creative Minds

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## Otter Math

Common Name	size inches	size cm	weight US	weight metric
African Clawless Otter	42-63 in	115-160 cm	26-42 lb	12-19 kg
Asian Small-Clawed Otter	25-37 in	65-94 cm	4-11 lb	2-5 kg
Congo Clawless Otter	43-59 in	110-150 cm	26-37 lb	12-17 kg
Eurasian Otter	42-54 in	102-138 cm	9-24 lb	4-11 kg
Giant Otter	57-71 in	145-180 cm	53-84 lb	24-38 kg
Hairy Nosed Otter	41-44 in	105-113 cm	11-17 lb	5-8 kg
Neotropical Otter	35-53 in	90-136 cm	22-31 lb	10-14 kg
North American River Otter	39-60 in	100-153 cm	18-24 lb	8-11 kg
Smooth Coated Otter	42-51 in	106-130 cm	15-22 lb	7-10 kg
South American River Otter	39-46 in	100-116 cm	11-22 lb	5-10 kg
Spotted-Necked Otter	37-45 in	95-115 cm	9-15 lb	4-7 kg
Marine Otter	34-45 in	87-115 cm	7-13 lb	3-6 kg
Southern Sea Otter	48 in avg	114 cm avg	45-65 lb	20-29 kg
Northern Sea Otter	60 in avg	153 cm avg	50-100 lb	23-45 kg

In general, male otters are longer and heavier than female otters. Shown sizes and weight conversions are rounded. Body length includes tails.

Use the chart to answer the questions below:

- Which otter species is about your size?
- Which otter species is about your weight?
- Which otter species is the largest? Smallest?

The sizes are given in inches. Do you know how many inches are in a foot? Pick an otter and convert the inches to feet and inches.

Select an otter species and find items that weigh the same or similar amount. Use two columns to make a list of the comparisons you made.

How tall are the adults you know? If you don't know, you can ask one or look up the height of a famous adult. Are there any otter species longer than their height?

## Adaptations



1: webbed front feet with claws



2: flat molars to break shells



3: sharp teeth to hold prey



4: large, webbed back flippers



5: padded front paws to hold sharp prey



6: wrap themselves in kelp to stay in one place

Adaptations help animals survive in their habitats. Which of these adaptations would you find on a river otter? Which belong to sea otters?

Physical adaptations are body parts. Behavioral adaptations are things they do. Can you identify which of these adaptations are behavioral?

Answers:

River Otters: 1 Most, but not all, river otters have claws on their front feet. They all have some type of webbing between their toes. 3.

Sea Otters: 2. 4. 5. 6.

Behavioral: 6

## Fun Facts

All 13 species of otters are on the IUCN Red List of Threatened Species. Like many animals, one of the leading threats to otter populations is a loss of habitat due to human development and other activities. Some species of otters are still hunted for their fur. Sea otter populations are vulnerable to oil spills from large ships and tankers that travel near their coastal habitats. Otter species are sensitive to many kinds of pollution in the water and on land.



Otters are found on all continents except Australia and Antarctica.

All otters have some type of webbing on their feet. Webbed feet help animals move through the water.

*Which of these girls do you think will move faster through the water? Why?*



Sea otters have special “pockets” under their arms to hold food as they hunt for more. They may also carry around their favorite rock or other tool for smashing the shells of their prey.

*What kind of tools do you use to prepare and eat your food?*



When chasing prey, river otters can hold their breath underwater for up to 2 minutes. Sea otters can hold their breath for up to 5 minutes.

*How long can you hold your breath?*



Sea otters need to eat around 25% of their body weight each day. River otters need to eat about 15% of their body weight each day. *How much would you need to eat if you were a sea or river otter?*

Sea otters can have up to 1,000,000 hairs in one square inch on their body. River otters can have up to 450,000 hairs per square inch. Humans average 2,200 hairs per square inch on their head.

one  
square  
inch

## Otter Enrichment at Zoos and Aquariums

Otters and other mustelids are known for being very clever. When they are under human care at a zoo or aquarium, their caretakers must be very creative to come up with items for them to interact with, and activities to keep their minds busy and encourage natural behaviors. This is called providing **enrichment**.

Enrichment can be something as simple as a toy or special treat. Learning something new or fun during a training session can also be a form of enrichment.

Training is a very important part of caring for animals. For example, an otter can learn to move onto a scale to be weighed. Losing or gaining weight can be a sign that something might be wrong. Having this information helps keepers make important health decisions.

Zookeepers do all kinds of things to keep the otters in their care happy and healthy. They might make an “ice treat” by freezing a Jell-O mold full of water and clams. Otters love to smash the ice to get to the food frozen inside.

What do you think a sea otter would do if you gave it some cloth strips from a car wash? Use it like kelp to wrap themselves in, of course!

Have you ever provided enrichment for your pet? If you give them toys and play with them, that is enrichment. Cats love playing in old boxes or chasing things as though they are hunting. Many dogs may be happy chasing a stick or an old ball.





Thanks to Christine Schmitz, Curator of Education at Utah's Hogle Zoo for giving me my first "real" job at an aquarium and to Everett Athorp who took me to see my first wild sea otters.—CM

Thanks to Lesley Wright of the International Union for Conservation of Nature (IUCN) Otter Specialists Group for verifying the accuracy of the information in this book.

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African Clawless	<i>Aonyx capensis</i>	Rowan Jordaan
Eurasian Otter	<i>Lutra lutra</i>	Henry Krüger
Neotropical Otter	<i>Lontra longicaudis</i>	Nicole Duplaix
Hairy-Nosed Otter	<i>Lutra sumatrana</i>	Nicole Duplaix
Southern River Otter	<i>Lontra provocax</i>	Jose Luis Bartheld
Spotted-Necked Otter	<i>Hydrictis maculicollis</i>	Jan Reed-Smith
Marine Otter	<i>Lontra felina Gonzalo</i>	Henry Krüger
Congo Clawless	<i>Aonyx congicus</i>	Rita and Glen Chapman

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