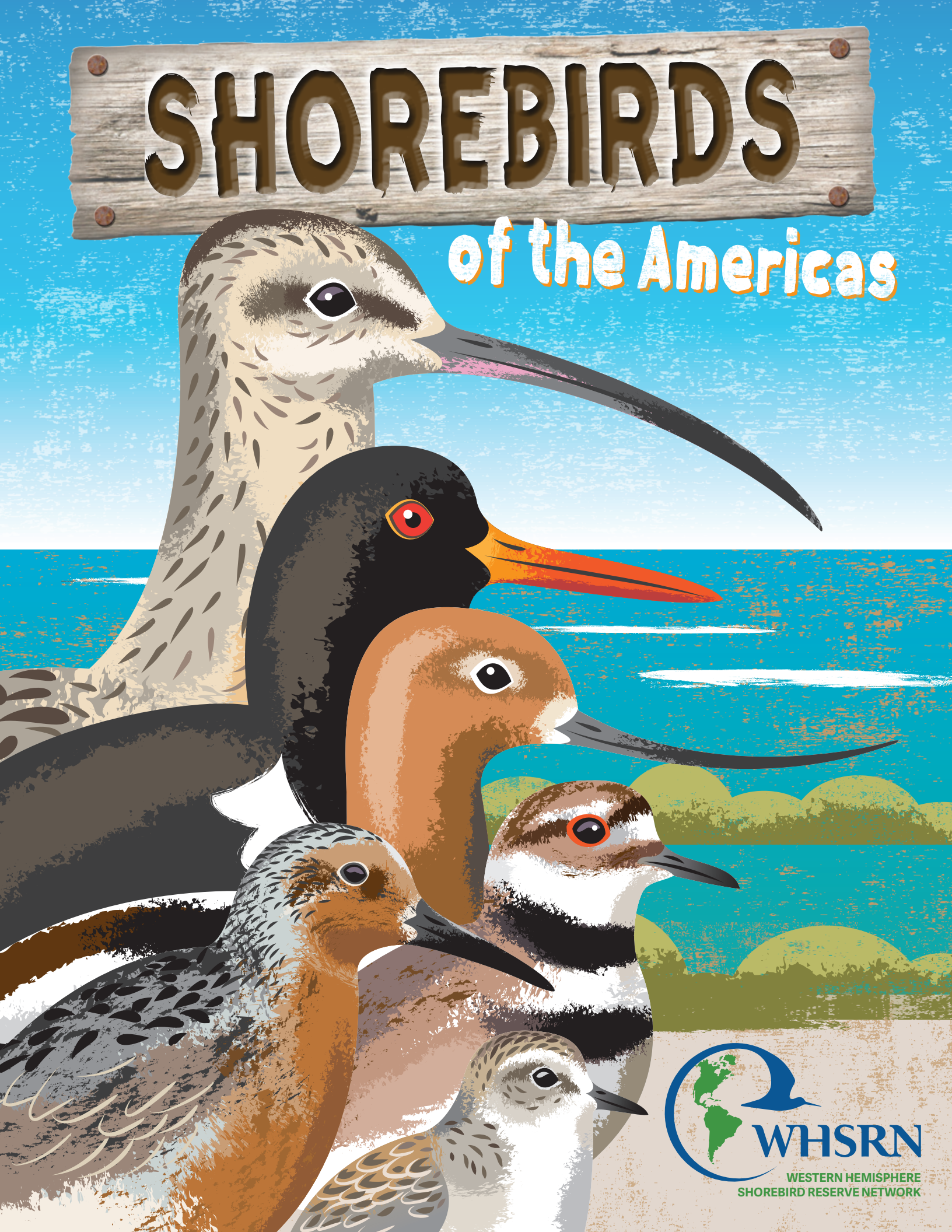
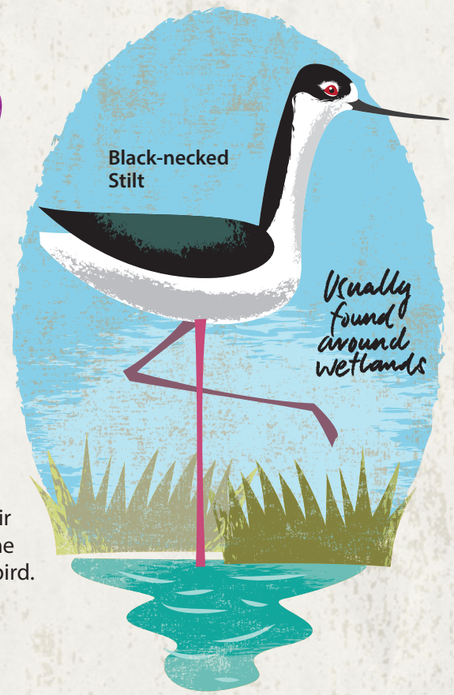

SHOREBIRDS
of the Americas
WHSRN
WESTERN HEMISPHERE
SHOREBIRD RESERVE NETWORK

# What is a SHOREBIRD?

Shorebirds are a group of long-legged birds that live in wetlands and along shorelines. The Americas have lots of shorebirds! Some species live in one place all year; these are called residents. But most species travel long distances each year. These migratory shorebirds fly amazing distances, some as far as the Arctic.

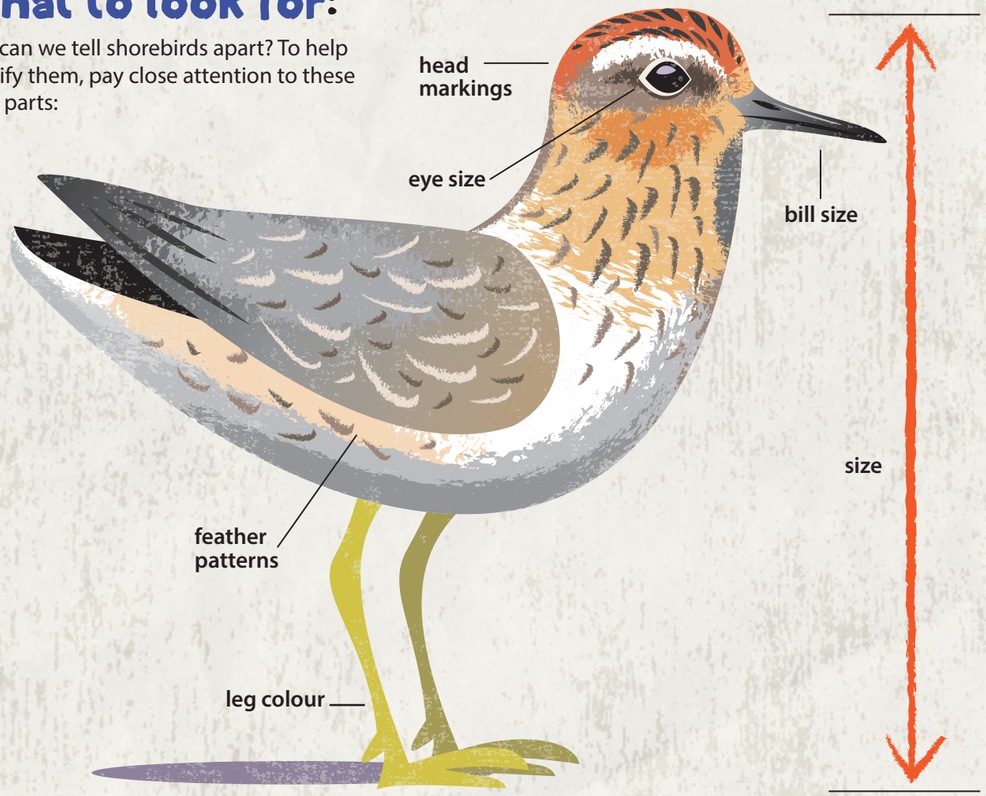



Shorebirds have really long legs for their body size. The Black-necked Stilt has one of the longest leg to body ratio of any bird.

**Can you name any other long legged birds?**

## What to look for:

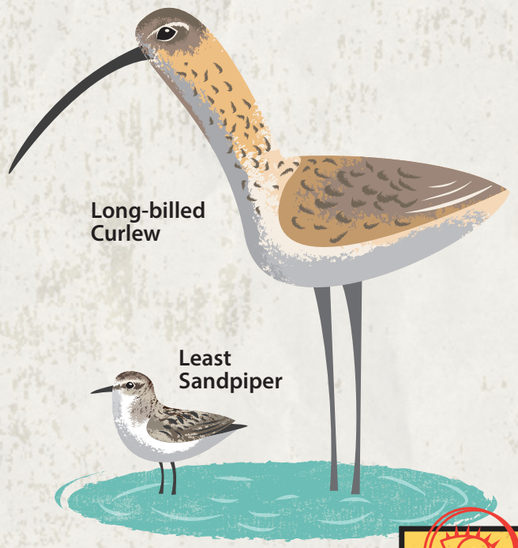
How can we tell shorebirds apart? To help identify them, pay close attention to these body parts:




## Beaks for all occasions


**In a wetland or on a beach food is everywhere. Even though you cannot easily see it—shorebirds can! Each shorebird species has a uniquely adapted beak to find its food.**

**Shorebirds eat a range of foods including crabs, molluscs, worms and insects.**



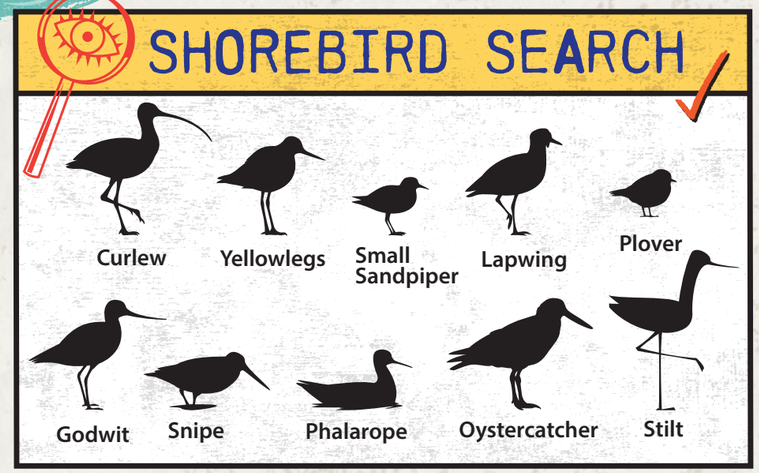

## Big & small

Shorebirds come in lots of sizes. The largest shorebird in the Americas is the Long-billed Curlew which can weigh up to 700 grams. The smallest is the Least Sandpiper, which weighs just over 23 grams.

**How many Least Sandpipers would weigh as much as a single Long-billed Curlew?**

There are over 220 different species of shorebirds worldwide with 84 regularly found in the Americas. Scientists group similar species together.

**Can you find these shorebirds hiding in this book?**



# WHY MIGRATE?

**Shorebirds fly to the Arctic to breed. While they are there, it is light 24 hours a day and there is plenty of food. When it starts to get cold, they return to South America.**


Flying nonstop for several days, long distance migrants may only make a few stops along their flyway journey.

To make up for all the weight they lose during their long flights, they must double their weight at these resting stops.

## Superhighways

The migration routes birds travel along are called "flyways". The Americas has three main flyways – Atlantic, Midcontinent, and Pacific. Some birds will fly as much as 30,000 kilometers roundtrip on these superhighways.

## Flyways

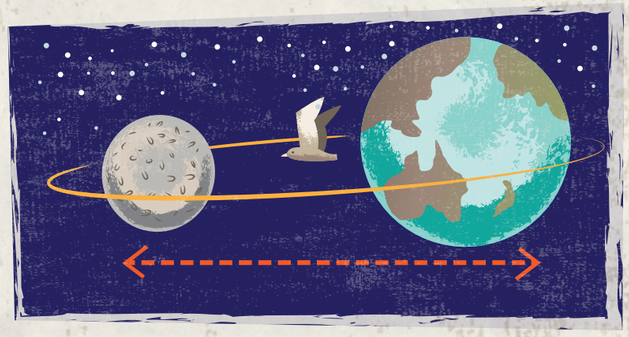
- Pacific
- Midcontinental
- Atlantic

# PROTECT OUR WETLANDS

**Shorebirds rely on our wetlands to survive. We need to protect these areas because they are important for our health and happiness too.**

## Epic journey

Some Red Knots will fly from southern Chile to breed in the Arctic every year. In its lifetime a shorebird might fly as many kilometers as it takes to travel to the Moon and back. That's 768,802 km.



## Fast flyers

Shorebirds can fly non-stop for 2 or 3 days, at a maximum speed of 80 kilometers per hour! These long flights are often over 3,000 kilometers above ground.

Time spent per year in -


## Where is home?

Migratory shorebirds spend the majority of their life in South America (and southern North America), up to six months. They will spend just six weeks in the Arctic.

# The GREAT Red Knot Journey

**You're a Red Knot. Apart from the long distance to your breeding grounds, you face many challenges along the way!**

GOOD LUCK!

START

Your're full of energy. Move forward 3 spaces.

You are chased by a dog. Go back to the start.

Dog kept on leash. Move forward 3 spaces.

You will need: dice, some counters and some friends to play with. To play, roll the dice and fly!

A local school visits a wetland to see you. Move forward 3 spaces.

Birdwatchers watch from a safe distance. Move forward 3 spaces.

You are disturbed by walkers. Move back 3 spaces.

It's International Migratory Bird Day. Move forward 4 spaces.

You have completed your journey. CONGRATULATIONS!

END

A housing development is built on a former wetland. Move back 4 spaces.

People keep distance from you. Move forward 3 spaces.

A truck is driving on the beach. Move back 4 spaces.

Land is reclaimed to build a port along the flyway. Move back 7 spaces.

You hit severe weather. Move back 3 spaces.

Poor feeding site. Move back 3 spaces.

A local group revegetates a coastal creek. Move forward 4 spaces.

A coastal wetland is saved from development. Move forward 5 spaces.

Perfect weather! Move forward 2 Spaces.

A falcon is hunting near you. Move back 4 spaces.

Jet skis disturb your feeding. Move back 3 spaces.

A conservation zone has been declared along the migration flyway. Move forward 6 spaces.

You find lots of food. Move forward 5 spaces.

An Arctic fox is on the prowl. Move back 4 spaces.

# Magical Migration

Shorebirds have a number of amazing ways to help them navigate during migration. The sun, stars, land masses and even the earth's magnetic field are all used to get them to where they need to go.


Shorebirds prepare for their long-haul flight by increasing their body weight by up to 70%. This means shorebirds need to eat a lot and constantly before migrating.

Their long distance feat is powered by enlarged pectoral muscles and a heart that is very energy efficient. Organs that are not used during flight even shrink before the journey.

Do shorebirds sleep while flying? Scientists think they might have micro-naps as they flap their wings.

Young birds make the journey from the Arctic to South America on their own, leaving after their parents. They somehow know the route by instinct, without being taught.

**When you see shorebirds feeding, keep a safe distance so that you don't disturb them!**

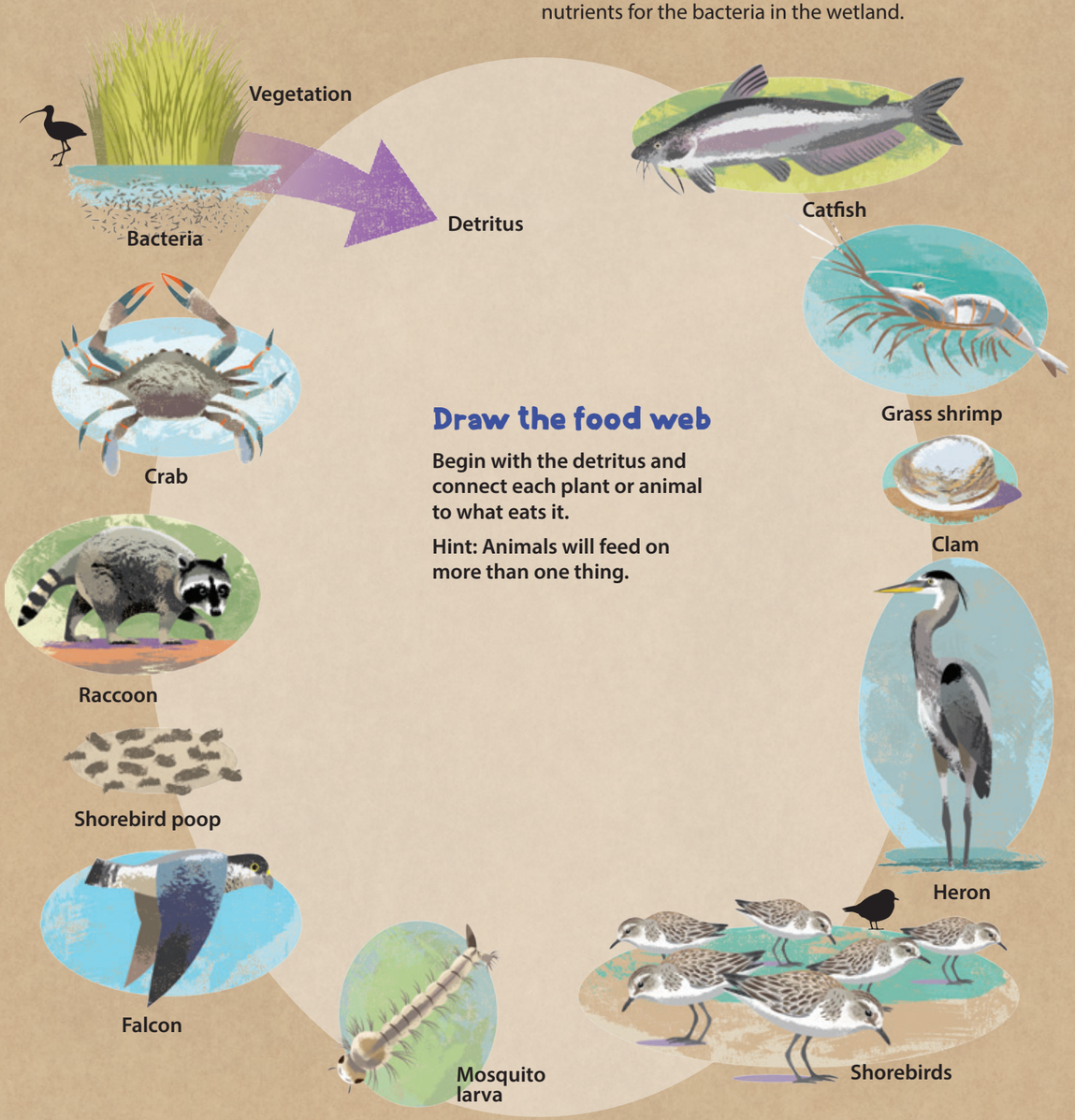
# Wetland Food Web

Grasses are the building blocks of the wetland food web, providing food for lots of wildlife. Most critters of the wetland cannot digest the tough plant material.

When the grass dies, bacteria break down the dead leaves and stems through decomposition. The leftover decomposed matter is then available to other animals in a form they can eat.

This decomposed vegetation, along with tiny bits of animal remains, is called detritus. Crabs, fish, mussels, clams, and many other animals feed on detritus. In turn they eventually become food for other animals. Nothing is wasted and everything is dependent upon one another.

Shorebirds are an important part of this food chain. Their waste, or poop, provides important food and nutrients for the bacteria in the wetland.




## Draw the food web

**Begin with the detritus and connect each plant or animal to what eats it.**

**Hint: Animals will feed on more than one thing.**

# WORD SEARCH

**FIND the words below hidden in the puzzle**

| R | V | A | U | S | A | L | T | M | A | R | S | H | M | P | X | K |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | N | V | E | R | T | E | B | R | A | T | E | I | E | M | S | F |
| N | R | J | P | U | O | U | I | A | Y | O | A | E | I | T | Q | O |
| Y | T | H | R | E | A | T | E | N | E | D | Y | L | N | U | V | A |
| D | R | M | G | S | E | T | I | C | P | M | X | S | T | Y | O | P |
| S | I | E | D | M | I | G | R | A | T | I | O | N | E | H | D | E |
| K | H | S | S | E | R | O | O | I | M | P | L | G | R | S | P | L |
| R | B | O | T | T | C | O | N | S | E | R | V | A | T | I | O | N |
| H | E | M | R | U | O | L | X | S | Y | E | A | T | I | R | D | F |
| A | H | S | U | E | R | R | I | E | B | R | E | E | D | I | N | G |
| B | A | T | I | D | L | B | A | N | U | S | S | K | A | M | U | E |
| I | Y | O | M | D | F | I | A | T | E | R | I | I | L | M | B | F |
| T | C | M | T | I | E | L | N | N | I | E | S | T | U | A | R | Y |
| A | R | C | T | I | C | N | A | E | C | O | M | Y | Z | A | W | E |
| T | U | I | N | X | Q | I | T | T | E | E | N | O | Y | I | U | C |

ARCTIC
BREEDING
CONSERVATION
DECLINE
DISTURBANCE
ESTUARY
HABITAT
INTERTIDAL
INVERTEBRATE
MIGRATION
MUDFLAT
RESIDENT
RESTORATION
SALTMARSH
SHORELINE
THREATENED

## Celebrate World Migratory Bird Day

People need to know about shorebirds so they will look after the wetlands where they live. You can help by telling people about them! Why not celebrate World Migratory Bird Day with your family, friends or school?

You can learn more online:
**www.migratorybirdday.org**

# WETLANDS - A USEFUL HABITAT

Metaphors are a way to compare unrelated things, such as "The classroom was a zoo." Below are pictures of items that may seem unrelated to wetlands, but in fact, are metaphors for a wetland.

Think about what each item does. Can you figure out why these items can be compared to a wetland? Describe how a wetland's function can be compared to the item's function.

Sponge

_____

Cradle

Egg beater

_____

**What is a home, a sponge, and a strainer all at the same time?**

_____

Strainer

_____

Pillow

_____

Flower

Can of soup

_____

Example: A beautiful place

This booklet was adapted from a project produced by BirdLife Australia.

**Editors:**
Americas editors: Laura Chamberlin, Benoit Laliberte

BirdLife Australia editors: Lindall Kidd, Steve Klose, Laura Rhodes, Marta Ferenczi, Milly Formby, Grainne Maguire

**Design and artwork production:**
Robert Mancini www.evergreendesign.com.au



The Western Hemisphere Shorebird Reserve Network (WHSRN) is a science-based, partnership-drive initiative to conserve critical sites and habitats for shorebirds throughout the Americas.

Coordination and network support services are provided by the WHSRN Executive Office, housed within Manomet's Flyways program www.manomet.org/flyways

You can learn more about America's migratory shorebirds by visiting www.whsrn.org and www.shorebirdflyways.org

WHSRN Executive Office - Manomet
P.O. Box 1770, Manomet, MA, 0235
T: 508-224-6521 | whsrn@manomet.org

This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :

Environment and Climate Change Canada
Environnement et Changement climatique Canada