### Audubon





From Hunted for Hats...

Hats decorated with bird feathers were the height of fashion in the late 1800s. The large. beautiful feathers of earets and other wading birds were the most popular. Eventually these birds were hunted almost to extinction But in 1896 two women began the fight to ban the use of bird feathers in hats. They succeeded! The federal Migratory Bird Treaty Act was passed in 1918 and remains one of the strongest laws protecting wild North American hirds



### ...To Symbol of Conservation

People were able to work together to protect the Great Egret. That's why it became the symbol of the National Audubon Society in 1953.



# The Watery World of Wading Birds

In the water and snatches a frog! The bird is a wading bird. Look at wading birds closely and you'll see an animal adapted for living and finding food in and around water.

Long legs mean these birds can wade into shallow water without getting their feathered bodies wet. Big feet with spread-out toes keep them from sinking into the gooey mud. A long neck and a long beak help them reach out and grab the food they spot in the water or on the ground.

You'll find wading birds—herons, egrets, ibises, spoonbills, storks, and others—in all kinds of soggy habitats, from the edges of lakes, ponds, and rivers to swamps and marshes to saltwater bays. Get ready to find out more about these amazing big birds!

**Great Egret** 





#### See, Feel, Grab, Stab!

Different wading birds have different techniques for getting food.

Herons and egrets find food by sight, grabbing and sometimes stabbing fish, frogs, snakes, or other prey. Ibises use their sensitive curved bill to probe in the sand, mud. or grass until they touch prey. Then they grab it. Their diet includes crayfish, crabs. insects. worms, and snails. Wood Storks have a similar hunting technique, holding their large bill partly open in the water until they feel a fish, than snapping it shut to capture the prey.

Roseate Spoonbills have an unusually-shaped bill. Instead of ending in a point, it is flared and flat at the end. They find food by holding their bill slightly open in the water and sweeping it from side to side. The bill snaps shut when it comes into contact with a fish, shrimp, crab, or other prey.



The Reddish Egret sometimes shades the water with its wings as it wades to hunt for fish. This draws fish into the shadow and also helps the bird see better on a bright day, just as you see better when you shade your eyes with your hand.



**Great Blue Herons** and other wading birds swallow their food whole. After catching a fish, a Great Blue Heron flips it until it can be swallowed headfirst. That way the fish's sharp fin barbs don't scratch the heron's throat or get stuck. 



Green Herons stand verv still or move slowly, stalking frogs and other prey. They have been observed dropping leaves, small twigs, berries, and even feathers onto the surface of the water as "bait" to lure fish.



Wood Stork When a Wood Stork feels a fish with its bill, the bill automatically snaps shut. This reflex action happens in 25 milliseconds, and is considered to be one of the fastest reflex actions among vertebrates (animals with backbones).



Snowy Egret

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When looking for food, Snowy Egrets shake and swirl their bright yellow feet in shallow water, forcing fish, crayfish, worms, and other animals they eat out into the open.



Wood Storks and Roseate Spoonbills hunt for food in shallow water.

## Way to Go, Wading Birds!

Wading birds have some very special hunting and feeding skills!

#### IN THE FIELD



### Meet Ann Paul: Working for the Birds

A scientist explains that birds need our help to protect their habitats.

You might say scientist Ann Paul is wading birds' best human friend, at least in and around Tampa Bay in Florida. Ann works on the waterways and islands of Audubon's Florida Coastal Islands Sanctuaries. Her job is to continue the work this sanctuary has been doing for more than 80 years: protecting nesting bird colonies so that they remain "islands of life."

"My job is to help people understand that we must let these birds have these islands as protected sanctuaries while the embryos in the eggs develop and the chicks grow up," she says. Every workday is different for Ann. "Some days we install 'no trespassing' signs to help boaters know where birds are nesting and to please stay off that island and let the birds successfully raise their young. Some days we go to the islands and count the nesting birds." The goal is to get an estimate of the population of each waterbird species in the region.

Large birds nest together in groups called colonies—also called rookeries—as a way of protecting their young. Ann explains how this helps them survive: "Large birds such as pelicans, herons, ibises, storks, gulls, terns, and skimmers can't hide in the trees or bushes to raise their young the way mockingbirds or warblers do." These birds and their nests are much bigger and it takes a long time for their young to be able to fly and find food for themselves. Their nests are pretty easy for predators to spot, but by choosing good nesting sites—mostly on small islands—the birds are able to keep their chicks safer.

For example, raccoons like to eat birds' eggs, but if the nests are on an island, raccoons swimming there risk being eaten by alligators.

Another part of Ann's job is to take members of the public—especially those who make policies that could affect bird habitat—to the islands so they can see with their own eyes why it's important to protect birds and their nesting sites.

"I have always been interested in animals and their wonderful adaptations," says Ann. (Adaptations are characteristics developed over many generations that help an organism survive in its environment.) She studied biology and ecology in college, and now she gets to do what she loves for a living. "It is exciting to see birds making their nests, courting, catching fish or insects or whatever they are especially designed to eat."

With more and more people moving to coastal areas, there are more threats to habitat for birds in the region. Protecting places like Audubon's coastal sanctuaries is important so that these birds and their habitat will be part of our natural heritage in the future.

If you have a question for Ann, send an email to: Audubon\_adventures@audubon.org.



Young people observe nesting birds at the Venice Area Audubon Society Rookery, Venice, Florida.

Audubon adventures

#### Danger: Fishing Line and Fishhooks

Birds that live in and near water face a danger that may surprise you: fishing line and fishhooks. People who fish sometimes throw used fishing line in the water or leave it on the dock or shore. That's the worst thing they can do. The line can easily get wrapped around the beaks, wings, and feet of wading birds as well as birds that swim. The resulting injuries often make the bird unable to hunt effectively and it can starve to death. So if you fish or you know anyone who does, remind them: Don't leave fishing line behind!









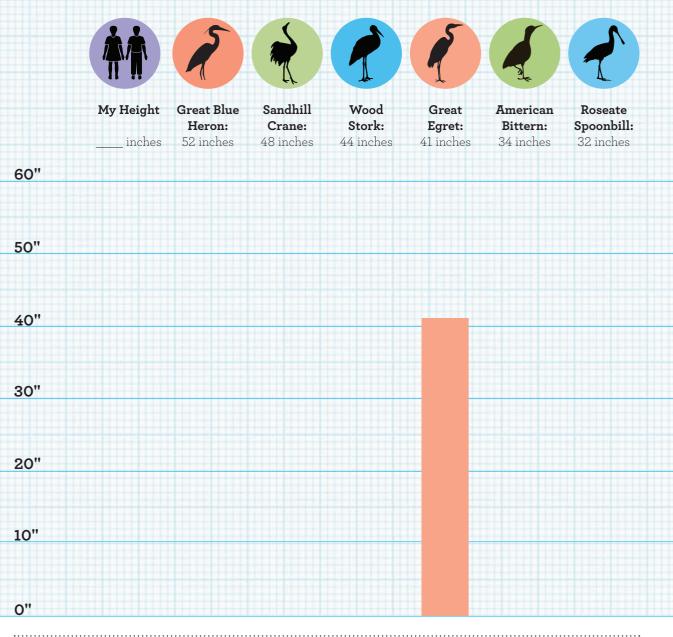
#### Protect Watery Habitats

Wading birds live in a watery world, and clean water is essential for their survival. Rain that falls on streets, yards, parks, and farms flows through pipes and soil back into rivers, lakes, and other waterways where wading birds live, feed, and breed. You can help keep their habitats clean even if vou don't live near water. Here's how. **1.** Learn the names and locations of the waterways and wet habitats in your town, city, or region. 2. Start a clean water ecology club in vour school. **3.** Conserve water: Turn off the faucet while brushing vour teeth. Catch rainwater in barrels to water gardens and lawns.

**4.** Always carry away trash and anything else you bring when visiting lakes, ponds, rivers, and seashores...or anywhere outdoors.

## **Standing Tall**

Wading birds have long legs and long necks, which makes some of them very tall. See how you measure up! Calculate your height in inches. Then create a bar graph showing your height compared with the heights of these wading birds. (We've started the graph for you.)



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