

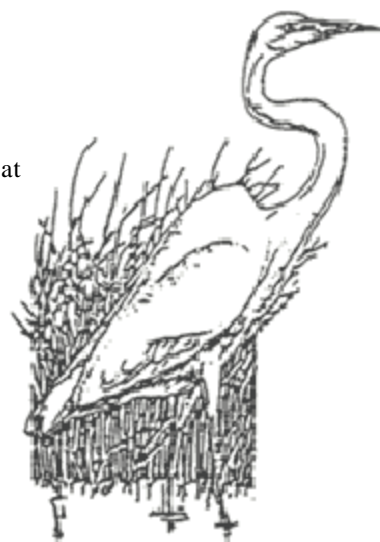
## ENDANGERED AQUATIC SPECIES IN ILLINOIS

When you hear about endangered species, do you think of animals that live in the rain forests of South America, the whales that live in our oceans or the elephants and rhinoceros that live in Africa? Did you know that we have endangered species right here in Illinois, too? You don't have to live in an exotic place in order to understand that there are all kinds of species that are threatened with extinction.

In Illinois, there are nearly 500 species of plants and animals that are listed as endangered or threatened--that is, in danger of disappearing from the wild within the borders of our state. More than 55 percent of them depend on wetlands or other aquatic habitats for survival.

### AQUATIC HABITATS

There are a wide variety of aquatic habitats, including lakes, ponds, rivers, streams and wetlands. Each of these habitat types is unique and complex. A pond is not simply a miniature version of a lake, nor is a stream just a miniature version of a big river, even though it might look that way at first glance. Each of these habitats has small differences that make it unique, like the kind of substrate at the bottom (such as clay, sand, gravel or boulders) or whether the water is standing still or moving and moving fast or slow.



### ENDANGERED AND THREATENED AQUATIC SPECIES

Just as aquatic environments are unique, so are the species that use them. It's not just animals that are endangered, but plants, too; and when we talk about endangered aquatic animals, we mean much more than just fishes. The animals that are disappearing from our aquatic environments also include crayfish, mussels (clams), snakes, turtles, birds, mammals and more. Some of these species live in the water all the time, while others use aquatic areas for feeding and nesting, but also live on dry land part of the time.

**These are just some of the endangered and threatened aquatic species found in Illinois.**

<u><i>Fish</i></u>	<u><i>Salamanders</i></u>	<u><i>Birds</i></u>	<u><i>Plants</i></u>
lake sturgeon	dusky salamander	snowy egret	leatherflower
bigeye chub	four-toed salamander	black-crowned night-heron	water marigold
bluehead shiner	silvery salamander	pied-billed grebe	Lea's bog lichen
harlequin darter	hellbender	least bittern	bloodleaf
bantam sunfish	<u><i>Snakes</i></u>	black tern	water-pennywort
redspotted sunfish	timber rattlesnake	king rail	squirting cucumber
least brook lamprey	Kirtland's snake	yellow-headed blackbird	round-leaved sundew
<u><i>Turtles</i></u>	broad-banded water snake	<u><i>Mammals</i></u>	heart-leaved plantain
spotted turtle	<u><i>Mussels</i></u>	river otter	bog bedstraw
alligator snapping turtle	fanshell	gray bat	cypress-knee sedge
river cooter	spectaclecase	<u><i>Insects</i></u>	Hall's bulrush
<u><i>Frogs</i></u>	fat pocketbook	Hine's emerald dragonfly	Nuttall's oak
Illinois chorus frog	purple wartyback	swamp metalmark butterfly	moccasin flower

## WHY ARE THERE SO MANY ENDANGERED AQUATIC SPECIES IN ILLINOIS?

The number one reason that so many aquatic plants and animals have become endangered is destruction of the habitats where they live. The loss of natural habitat in Illinois has been tremendous, with over 90 percent of our wetlands gone since our state was first settled. But habitat loss means loss in quality, not just quantity. For example, even though our rivers and streams haven't disappeared, the habitat quality in many of them has declined so much that the species that live there have suffered. More than 20 percent of the freshwater mussel species that once lived in Illinois are no longer found here and another 26 percent of them are considered to be endangered or threatened within our state.

The results of habitat loss are not always seen overnight. More often, the things that cause a plant or animal species to become endangered happen over a long period of time, as a result of a number of small changes in the environment. Notice the changes in the wetland below.



An undisturbed wetland has an abundant variety of plant and animal species and has clear water in both shallow and deep areas.



Changes in the land nearby may increase the pollution in the water running into the wetland and many plant species can't survive. Animal species which can't adapt to all the activity nearby aren't successful in raising their young and gradually disappear from the area.



As more land near the wetland is converted to other uses, silt and soil run into the wetland, and it gradually fills in. The wetland is finally so different from its natural state that it can't support the plants and wildlife that once lived there. Even though it wasn't drained or paved, it has still been destroyed.

**WHY ARE ENDANGERED SPECIES SO IMPORTANT?** Plants and animals can serve as environmental indicators, giving us an early warning sign that there is something wrong in our environment which might harm people, too. Any one of these species may also hold the key to curing a disease (80 percent of the world's medicines originally came from wild plants). Finally, just seeing a diversity of wild plants and animals adds to the pleasure of being outdoors.

**WHAT IS BEING DONE?** The Illinois Endangered Species Protection Act makes it illegal to kill or harm endangered or threatened species in our state and protects their habitats by ensuring that we consider the impacts new construction projects will have on them. The Illinois Endangered Species Protection Board determines which species have declined so much that they need to be listed as endangered or threatened in our state and, together with the Illinois Department of Natural Resources, determines what should be done to help them improve.