Wetlands self-guided activity

45-60 minutes

By: Phil White

Indian Creek Nature Center

Location: There are two wetlands at Indian Creek Nature Center. One just left of the Amazing Space building, as you are looking at the front of the building. The other is on the other side of Otis road (South) from the building, by the gravel parking lots. See map.

Wetland History: Wetlands are very important in many ways.

- In Iowa wetlands used to cover over 10% of the land surface. Over 95% of that has been drained. One acre of wetland can retain over 300,000 gallons of water. So, now all that water is headed directly into our waterways.

- They are also the “hotels” and “restaurants” for many plants and animals, especially during migration season for birds. It is a place they can find food, water and shelter in the brush that grows in and around the wetland.

- The diversity of life in a wetland is amazing, you just have to slow down and watch to see what might be lurking around the edges or on the surfaces.

What you might find: This is a list of things you might find during Spring, Summer and Fall at our wetlands. Not all things will be seen all the time, and you will find many things that are not listed.

- **Frogs/Toads:** Following are a few of the frogs/toads you might see in the wetland. Frogs have smoothish wet skin, toads are dry and bumpy. Some frogs live year round in the water others like

toads only come to water to breed.

- **Bullfrogs** are the large frogs lurking around the edge or just in the water. They are the largest frogs in Iowa. Like all frogs they lay eggs in the water which hatch into tadpoles. Uniquely, their tadpoles take two seasons to metamorphosis into frogs. So, the tadpoles laid this spring will not be frogs until next summer. They are native to Iowa but did not occur in our area until recently, and they tend to take over. They are brownish green color.

- **Green Frogs** are a medium sized frog that is mostly green, but might have brown or tan.

- **Leopard Frogs** are greenish-tan with darker spots. These used to be the most common frogs in the area, and in the early 1900s, were cherished by restaurants that served frog legs.

- **Little frogs**: if it is spring time you will hear Chorus frogs, Spring Peepers, or Cricket frogs. If you are patient you might find one, but they are not much larger than the top of your thumb.

- **American Toad**: In spring if you hear a long high trill call this is the American toad. In the late summer or early fall you will see the new toads leaving the wetland, they are only about an inch long.

- **Eggs and Tadpoles**

  - **Frog eggs:** Look for a gelatin mass of black eggs, Toad's eggs are in a long strip.

  - **Snail eggs:** Look on the bottom of rocks around the edges for a small gelatin mass, you might or might not see the black dots, think really little.

  - **Tadpoles** are everywhere from spring on. Big ones are bull frogs, others are hard to tell apart, look in the algae around the edges.

- **Insects**: depending on the season the insects vary quite a bit. Look for:

  - **Water Striders:** little guys that look like they are on 4 legs on top of the water.

  - **Whirligig beetles**: usually in bunches oval shaped and moving around randomly. These beetles carry an air bubble on their underside to breath.

  - **Boatman**: A small beetle that you might see around the edges, it is kind of long and skinny, but has two legs that look like oars on the sides, it uses them for diving.

  - **Dragonflies/Damselflies**: These are the flying insects above the water with long bodies, long transparent double wings. They are pretty much the top of the food chain here as they are voracious eaters of other insects.

- **Fish:** looking into the water you will see Pumpkinseed Sunfish, Blue gill, and shiny minnows called shiners.

- **Turtles:** Look for these reptiles sunning on any service in the water. You might see a painted turtle, with just yellow stripes on its head, and if you are really lucky you might see a snapping turtle, who has ridges on his back and a long pointy tail.

- **Plants:** There is diverse plant life both around and in the water. There is far more diversity at Lynch wetlands across Otis road, but plenty to see by the building as well.

    - **Algae:** In the water if you look closely you will see many different forms of algaes. Algae are very temperature sensitive so different species appear depending on the water temperature. Algae are some of the smallest plants in the water, and sometimes confused for mosses found on land.

    - **Cattails:** you should be able to find evidence of cattails year round. They are tall and are in shallows or along the edges. They are primary food and shelter for an amazing diversity of insects and animals. What do you think lives on them? Their roots actually taste like potatoes. Muskrats and other animals rely on these starchy roots all year around. Native Americans used to dig them up and dry them for winter use. Cattails are a favorite nesting area for Red-winged blackbirds.

    - **Water Iris:** Thin 2 to 3 foot tall green blades in a clump, they will bloom for a short period in late May.

Look around the area in general. You should be able to spot many species of birds. Also along the edges and the trails around the wetland is a good place to look for animal tracks. Look in the plants that grow between the building and the wetland. You can find evidence of insects.

Now that you have explored this area think about the life cycle of some of these animals. **How do amphibians, like frogs and toads, or reptiles like turtles and snakes survive the winter?** They are cold blooded so they can't regulate their body temperature like we, warm blooded animals can.

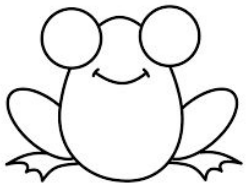
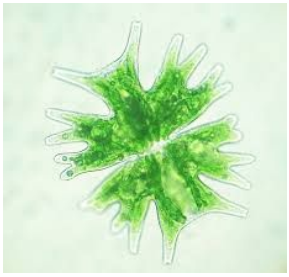
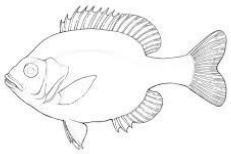
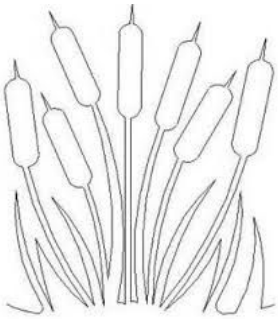
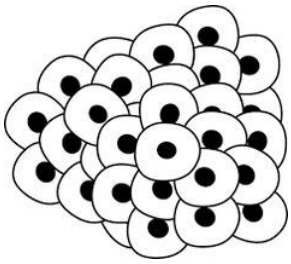
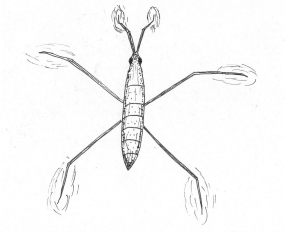
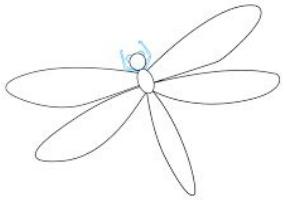
- Leopard and Green Frogs, Bullfrogs and aquatic (water) turtles, dig into the mud on the bottom of the pond, and slow all their body functions down. Frogs can get a little bit of oxygen through their skin, to help them make it through the winter.

- Chorus frogs and Spring Peepers on the other hand have a bit of a natural antifreeze in them that allows them to survive being frozen. They dig into leaf litter or under logs for the winter, freeze and then thaw out in the springtime.

- Snakes (and land turtles) find holes in the ground that allows them to get below the frost line to wait out the winter. They hibernate. Many snakes return to the same spot every year. This area is called a hibernaculum. We have built a couple of these on the grounds for our friendly little snakes.

- Toads and Cricket frogs also hibernate on land below the frost line

Wetland Activity sheet: Key

Frog/Toad  oad	Something Hard	Turtle 	Algae 
Fish 	Tadpole 	Cattail 	something unusual
snail/frog eggs 	Water strider 	rock	something smooth
Dragonfly 	a plant	whirligig beetle 	Insect

Name: _____

Wetland Activity sheet: Draw a picture of the items as you see them in the Wetlands.

Frog/Toad	Something Hard	Turtle	Algae
Fish	Tadpole	Cattail	Something unusual
Snail/frog eggs	Water strider	Rock	Something smooth
Dragonfly	A plant	Whirligig beetle	Insect