Thank you for your interest in Starved Rock State Park. The following Starved Rock Sapling seasonal program is to help engage children and families in nature; at home, in their neighborhood, or at Starved Rock and Matthiessen State Parks.

Each packet will be posted to the Starved Rock and Matthiessen State Park Facebook page every October, January, April, and July. Packets can also be downloaded from the IDNR website at www2.illinois.gov/dnr/parks/pages/StarvedRock.aspx under the Interpretive tab.

Packets will include the following:

**DISCOVER:**
fun facts and information about the natural world.

**CONNECT:**
nature activities, storybook suggestions, games, and crafts.

**EXPLORE:**
ideas for getting outdoors and exploring the natural world in your backyard, neighborhood, or community parks.
DISCOVER

BIRD IDENTIFICATION FLASHCARDS

1. Eastern Bluebird
2. Great Horned Owl
3. Great Blue Heron
4. Baltimore Oriole
5. Red-shouldered Hawk
6. Wood Duck
7. Wild Turkey
8. Black-capped Chickadee
<table>
<thead>
<tr>
<th><strong>Great Horned Owl</strong></th>
<th><strong>Eastern Bluebird</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Stands up to 24&quot; tall, one of the largest owls in North America.</td>
<td>- Live in woodland edges, prairies, and meadows.</td>
</tr>
<tr>
<td>- Will sometimes nest in cavities but will also use abandoned nests of other birds such as hawks, crows, etc.</td>
<td>- Male is more brightly colored than the female.</td>
</tr>
<tr>
<td>- Call is series of “who, who” calls mainly at dusk, sometimes throughout night.</td>
<td>- Need nesting boxes, or holes in old trees or fence posts.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Baltimore Oriole</strong></th>
<th><strong>Great Blue Heron</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Call is similar to a American Robins “cheerio, cheery up, cheery me” but more garbled.</td>
<td>- Fish for frogs, fish, snakes, snails, and crayfish in ponds, streams, lakes, and marshes. They use their sharp pointy beak as a skewer.</td>
</tr>
<tr>
<td>- Will make a hanging nest in the shape of a bag with opening at top.</td>
<td>- Call is similar to a squawk or dog bark.</td>
</tr>
<tr>
<td></td>
<td>- Will nest in colonies high in tree tops.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Wood Duck</strong></th>
<th><strong>Sharp Shinned Hawk</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Very secretive or shy birds that live in or nearby streams, lakes, and ponds.</td>
<td>- Woodland hawk with a blunt or squared off tail with several dark lines. Coopers hawk has a curved tail.</td>
</tr>
<tr>
<td>- If disturbed or startled will take flight and make a high-pitched whistle like call.</td>
<td>- Small compact body and wings help it maneuver through trees and branches.</td>
</tr>
<tr>
<td>- Nest in cavities of old trees or wood duck boxes.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Black Capped Chickadee</strong></th>
<th><strong>Wild Turkey</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Call is just like its name “chickadee dee dee”.</td>
<td>- Hens/females will lay eggs in spring virtually anywhere on the ground. Just a scratch in the dirt as a nest.</td>
</tr>
<tr>
<td>- Make a small compact nest in cavities or nest boxes of moss, lichen, animal hair, and lined with feathers.</td>
<td>- Male turkeys or Toms have nothing to do with the babies.</td>
</tr>
<tr>
<td>- Small white eggs with speckles.</td>
<td>- Turkeys can fly short distances and will roost in trees.</td>
</tr>
</tbody>
</table>
What do chopsticks, tweezers, straws, and nutcrackers have in common? They all can be used to simulate different ways that birds eat food.

Learning Objective
Students and festival participants will discover that bird beaks are adapted for specific types of food; describe how adaptations work; and give two examples.

Background
Obviously, a hummingbird can’t gobble up a mouse, and a hawk can’t drink nectar from a flower. Each type of bird has a special beak and tongue adapted for eating a certain type of food. By visiting different stations and trying to use different tools to pick up various types of “food,” participants find out which bird beaks are best for tearing, scooping, cracking, or picking.

Species are adapted to the environments where they live. That’s partly why protecting habitats is so important: a species is perfectly adapted only to its own habitat’s unique types of basic components—food, water, shelter, and space to raise young. Following are eight examples of how the beaks of different species of birds have adapted to different environments and the types of food available in them:

- Hummingbirds have long hollow beaks, which protect their tongues, as they probe flowers and drink nectar.
- Ibises, curlews, godwits, kiwis, woodcocks, and snipe have very long beaks to probe for worms, crustaceans, and other small creatures in mud and shallow water.
- Cardinals, sparrows, grosbeaks, and other finch-like birds have very short, cone-shaped beaks, which are strong enough to break open tough seeds and shells.
- Pelicans have long, flattened, or pouch-like beaks to scoop up fish and other aquatic creatures.
- Flamingos and some ducks (such as Northern Shovelers) have bills that act like strainers to filter tiny plants and animals from the water. (Only some species of ducks are filter feeders).
- Nighthawks, whip-poor-wills, swifts, and swallows have large gaping mouths that act like nets to trap insects as the birds fly through the air.
- Warblers have small, sharp, pointed beaks for picking insects from leaves, bark, and twigs.
Fill The Bill Stations

Note: The * (asterisk) symbol indicates which tool best fits the food.

**STATION #1**
Water in a tall, narrow vase to represent nectar in a flower. (hummingbirds)

**TOOLS**
eyedropper or straw*, envelope or small fishnet, large scoop or slotted spoon

**STATION #2**
Large saucepan or other container filled with dry oatmeal, with fake worms (gummy worms work well!) on the bottom to represent worms buried in the mud. (ibises, curlews, godwits, kiwis, woodcocks, and snipes)

**TOOLS**
chopsticks or forceps*, nutcracker, strainer

**STATION #3**
Whole walnuts or other nuts to represent seeds with hard coverings. (sparrows, cardinals, grosbeaks, and other finch-like birds)

**TOOLS**
nutcracker or pliers*, tongs, chopsticks

**STATION #4**
Styrofoam “peanuts” (or dried macaroni) floating in an aquarium filled with water to represent fish and other aquatic animals. (pelicans)

**TOOLS**
large scoop or slotted spoon*, eyedropper or straw, chopsticks

**STATION #5**
Puffed rice in an aquarium filled with water to represent tiny aquatic plants and animals. (flamingos and some ducks, such as the Northern Shoveler)

**TOOLS**
strainer*, forceps or tweezers, tongs

**STATION #6**
Popped popcorn or small marshmallows tossed in the air (by a partner or booth assistant) (which must be caught while in the air) to represent flying insects. (nighthawks, whip-poor-wills and swallows)

**TOOLS**
envelope or small fishnet*, forceps or tweezers, chopsticks

**STATION #7**
Rice spread on a log to represent caterpillars and other insects. (warblers)

**TOOLS**
forceps or tweezers*, envelope or small, fishnet, nutcracker or pliers

**STATION #8**
Cherries hanging from a string to represent fruit hanging from a branch. (toucans)

**TOOLS**
tongs*, eyedropper or straw, strainer
<table>
<thead>
<tr>
<th></th>
<th>NECTAR</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CARDINAL</td>
<td>SWALLOW</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>WORMS IN THE MUD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SEEDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>FISH AND OTHER WATER ANIMALS</td>
<td>IBIS</td>
<td>FLAMINGO</td>
</tr>
<tr>
<td>5</td>
<td>TINY WATER PLANTS AND WATER ANIMALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>FLYING INSECTS</td>
<td>HUMMINGBIRD</td>
<td>PELICAN</td>
</tr>
<tr>
<td>7</td>
<td>CATERPILLARS AND OTHER INSECTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>FRUIT</td>
<td>TOUCAN</td>
<td>WARBLER</td>
</tr>
</tbody>
</table>
MAKE AN EDIBLE BIRD NEST SNACK

Edible Bird Nests

**Ingredients**

- 5 large Shredded Wheat biscuits
- 1 cup chocolate chips
- ½ cup chunky peanut butter
- jelly beans

**Directions:**

1. Crush biscuits with your hands in a large bowl.
2. Microwave chocolate chips for one minute and stir until smooth.
3. Stir in peanut butter until combined well.
4. Pour over biscuits and mix well.
5. Place biscuits into a nonstick muffin pan (or coat with nonstick cooking spray) and press firmly.
   Create a divot in the center of the nest with the back of a spoon.
6. Refrigerate for two hours. Use a knife to pop them out of the pan by sliding it down the side and lifting up.
7. Fill with jelly beans and enjoy!

**WEBSITES FOR LITTLE NATURALISTS**

https://kids.nationalgeographic.com
http://gws.ala.org/content/all-about-birds
https://www.brightpips.com/lets-learn-about-birds/

**NATURE READS!**

*Birds* by Carme Lemniscates
*The Little Book of Backyard Bird Sounds* by Andrea Pinnington and Caz Buckingham
*Migration* by Gail Gibbons
*Birds Nests and Eggs* by Mel Boring
EXPLORE

NATURE HIKE

- Explore your backyard, neighborhood, community parks, or Starved Rock and Matthiessen State Parks with a fun scavenger hunt this fall. Don’t forget to “LEAVE NO TRACE” by leaving only footprints and taking only memories when visiting a park.

Spring Scavenger Hunt

**What to LISTEN for....**

- Birds chirping or singing
- Wind in the trees
- Frogs and Toads calling
- Trickling waterfalls

**What to SMELL........**

- Spring wildflowers
- sandstone
- Campfire
- Fallen log or cut tree

**What to FEEL.........**

- Tree bark
- Tree buds and new leaves
- Mud
- Spring rain puddles
EXPLORE YOUR STATE PARKS!

Visit [www2.illinois.gov/dnr](http://www2.illinois.gov/dnr) to view state parks by region under the Parks and Recreation tab. What state parks are close to your home? Help your family plan a visit by exploring the parks webpage. What does your local state park have to offer; hiking, biking, horseback riding, camping, fishing, skiing, or boating? Read over the trail maps, trail suggestions, rules and regulations (stay on marked trails), and head out to explore. Here are some recommended trails for families at Starved Rock State Park. Happy Hikers=Happy Trails!

Great trek for families with little ones if you park off of route 178 at the St. Louis parking lot just south of the park’s west entrance and hike into St. Louis Canyon.

The most convenient hike at the park starting from the main parking lot by the river and visitor center leading to the park’s namesake Starved Rock and French Canyon. French Canyon is not recommended for children under age 5 or anyone in winter when the ground is snow and ice covered.

The eastern canyons of Illinois, Ottawa, and Kaskaskia are great for families due to their length and proximity to parking lots. Just one mile roundtrip hikes into the canyons. Be aware the trails are not paved and you will have a few small creek crossings in spring and early summer.