

Starved Rock Saplings



Fall Edition



Thank you for your interest in Starved Rock State Park. This 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 pages every October, January, April, and July.

Packets can also be downloaded from the IDNR website under the interpretive tab at:

dnr.illinois.gov/parks/park.starvedrock.html

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.



Starved Rock and Matthiessen State Parks



dnr.illinois.gov



StarvedRockandMatthiessenState Parks

How Do Animals Prepare for Colder Weather?

- To survive the cold winter months or prepare for hibernation, animals start preparing during the fall. These preparations are known as behavioral **ANIMAL ADAPTATIONS**.



- There are many different ways that animals start adapting this time of year, getting ready for the snow, ice, and freezing temperatures of Winter. Keep reading to learn about some of the common adaptations that are happening in your backyard, neighborhood, and Starved Rock and Matthiessen State Parks!

HIBERNATION: You might have heard about hibernation before! Hibernation is like a really, really long nap, called dormancy. When animals like bears, groundhogs, and hedgehogs go dormant, they conserve a lot of energy.

- **FAT ACCUMULATION:** To prepare for hibernation & food scarcity, animals start eating more to gain more fat that will provide energy and warmth during the coldest months of the year.

- **MIGRATION:** When the temperatures start to get colder, some animals, primarily birds, will migrate. This means they fly farther south to avoid the harsh cold weather. Basically, they take a winter-long vacation where it's warmer!



FOOD STORAGE: While some animals eat more during the fall to prepare for hibernation, others, like chipmunks & squirrels, gather food to store. That way, they have sustenance even when food is scarce in the winter.

THICKER FUR: Some animals will also grow thicker fur starting in the fall, which is like us wearing a thick coat to stay warm when it's chilly!



Make Your Own Thermometer

THERMOMETERS are tools that measure the temperature. They work by utilizing the principle that matter expands when heated and contracts when cooled. Some thermometers use expanding alcohol or mercury to measure temperature changes. Electric thermometers measure changes using electrical resistance.

Either way, during the Fall, temperatures start dropping fast, and to measure the exact changes you need a thermometer. The good news is that you can make one at home!

WHAT YOU WILL NEED

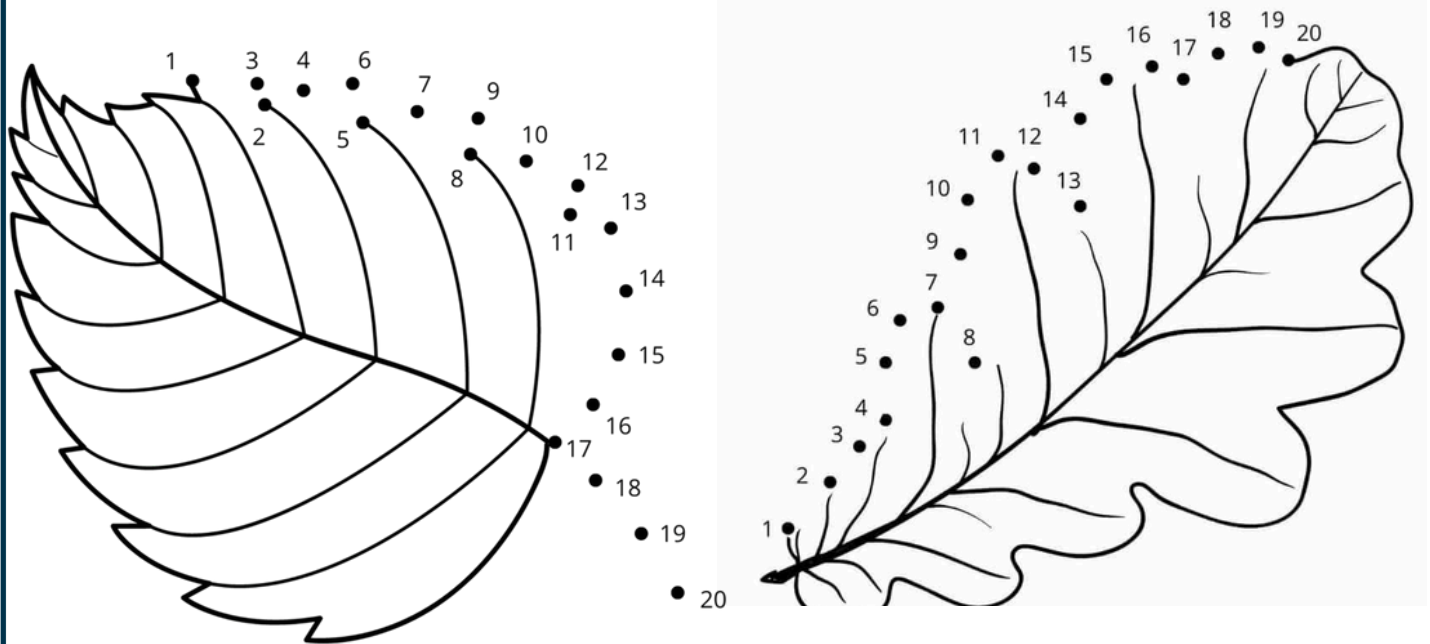
- Clear plastic drinking straw
- Medicine Dropper
- Empty Food Coloring or Vanilla Extract Bottle w/ Lid
- Fine-tipped permanent marker
- Liquid Food Coloring
- Ruler
- Paper Towels
- Water
- Small Bowl
- 70% Rubbing Alcohol
- Ice Cubes
- Modeling Clay

INSTRUCTIONS

1. Use a permanent marker to mark the straw, from the top down, at half-centimeter intervals. These will serve as level marks on your thermometer.
2. Form a ball of modeling clay and then push it flat. This round, flat piece of clay should be bigger than the neck of your bottle.
3. Use the straw to punch a hole in the middle of the round clay, just big enough for the straw to go through. Remove any clay clogging the straw.
4. Add rubbing alcohol to the bottle, filling it about a third to halfway up. Add a couple of drops of food coloring to the alcohol, close the bottle, and shake it so the liquids mix well.
5. Open the bottle and fill a medicine dropper or syringe with the colored rubbing alcohol. Carefully set the medicine dropper or syringe aside
6. Poke the straw through the hole in your modeling clay and place the clay on the bottle's neck so the straw hangs into the bottle. Adjust the straw so the end is immersed in the liquid, but does not touch the bottom of the bottle.
7. Use the clay to seal the bottle opening and hold the straw in place. Important: Make sure the clay forms an airtight seal around the straw and over the mouth of the bottle, but do not close off the straw's opening.
8. Drip the food coloring & alcohol mixture from the medicine dropper slowly into the straw. If the bottle is airtight, then it should form a column. Keep dropping until the fluid reaches about midway up the visible part of the straw.
9. Observe the fluid level in the straw. How do you think the fluid will change if it gets colder or warmer? Then, put ice water in a small bowl to cool it to 0 degrees Celsius (32 degrees Fahrenheit). Place the bottle portion in the water and see how it changes. Mark the closest line on the straw for 0 or 32 degrees.



Trace & Color the Leaves



Creative Corner: Autumn Leaf Masks!

What You Will Need

- Large Fall Leaves
- Paint
- Paintbrushes
- Scissors

Instructions

1. Find large and colorful Autumn leaves!
2. Use scissors to carefully cut out eye holes in the leaves.
3. Decorate leaves with paint (or glitter, stickers, and markers!). Consider creating animals, characters, or patterns.
4. Hold the mask by the stem to put your it over your face!



Photo From: <https://www.naturesupplyco.com/blogs/news/10-nature-inspired-fall-activities-for-your-crafty-child>



Make a Pinecone Bird Feeder

What You Will Need

- Pinecones
- Twine
- Peanut Butter
- Bird Seed
- A Spoon

Instructions

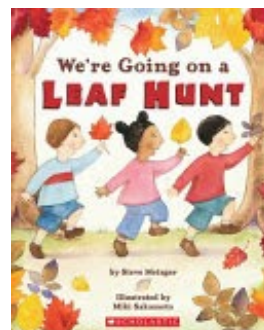
1. Find a pinecone, or several! Try to find large ones that have wide openings if possible.
2. Tie a short, 5-10 inch piece of twine around the top of the pinecone so that it forms a loop to hand it on a tree or hook.
3. Use the spoon to spread peanut butter throughout the pinecone, making sure it's spread onto each of the pinecone scales.
4. Dip the pinecone into birdseed, covering the peanut butter in seeds. Try using different types of birdseed and see what birds you can see!
5. Hang it on a tree and enjoy your new feathered friends!

**NATURE
READS!**



Leaves Fall
Down
by Lisa Bullard

Animals in Fall by
Martha E. H.
Rustad



We're Going
on a
Leaf Hunt
by Steve
Metzger

WEBSITES FOR PARENTS AND YOUNG NATURALISTS

- <https://dnr.illinois.gov/education.html>
- www.earthsky.org
- https://www.inaturalist.org/pages/seek_app



Don't forget you can rent the TREE Trunk for FREE from the IDNR EDUCATIONAL TRUNKS on hand at the park.

<https://dnr.illinois.gov/education.html>

Just ask by emailing Lisa.Sons@illinois.gov



EXPLORE

Play BINGO by having a autumn nature scavenger hunt & hike! See who can get a line first, and if you want a real challenge, try to fill out every square!



FIND THE LEAF & TREE

Search your neighborhood, local parks, and Starved Rock & Matthiessen State Parks for these common leaves and the trees they belong to.



Sugar Maple



Cottonwood



White Oak



Shagbark Hickory



Elm



Canada Yew

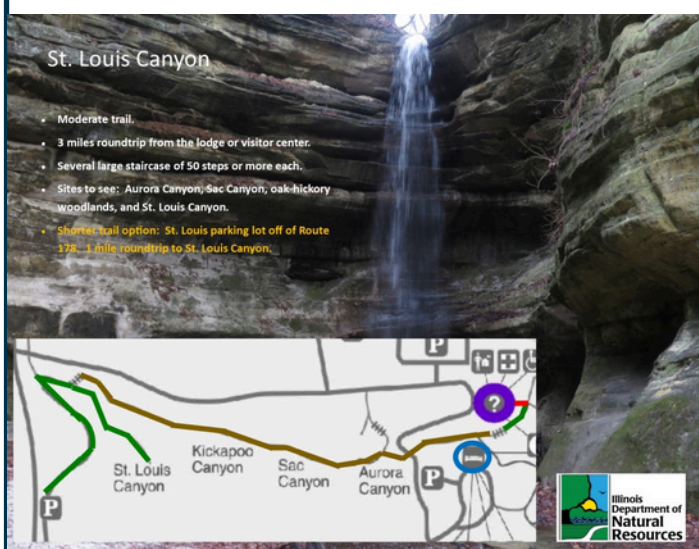
Make Leaf Printings

Once you find your leaves, you can make leaf printings by painting one side of the leaf and pressing it against paper or windows!

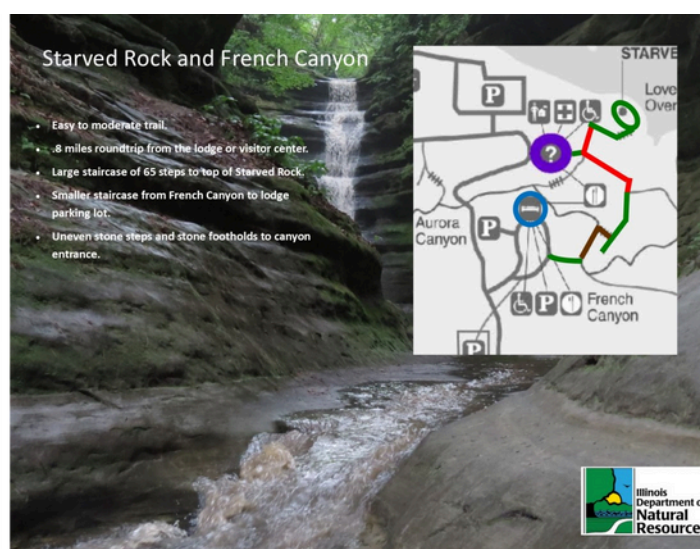


EXPLORE YOUR STATE PARKS!

Visit DNR.ILLINOIS.GOV 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 park's webpage. Does your local state park 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.