



NATURE NAVIGATORS

WELLNESS IN THE WILD



OSU EXTENSION
4-H YOUTH DEVELOPMENT

FALL CURRICULUM

SEPTEMBER, OCTOBER, NOVEMBER

NATURE DETECTIVES: DISCOVER THE WILD AROUND YOU

FALL COLOR HIKE CHALLENGE: FIND FALL ON THE TRAIL!

Goal: Get outside, get moving and discover the changes happening in nature during fall!

Your Challenge: Take a fall hike at a state park, local trail, nature area or even around your neighborhood. As you hike, become a Fall Nature Detective and look for signs that the season is changing.

- Hit the trail — Hike at least 1 mile, or choose a distance that is right for you.
- Find five signs of fall — Look for colorful leaves, seeds, nuts, migrating birds, animal activity or other seasonal changes.
- Listen to fall — Stop for one minute. How many different nature sounds can you hear?
- Capture the season — Take a photo of your favorite fall discovery or view.
- Leave it better — Safely pick up litter you find along the way.

Why It Matters: Fall is a great time to explore outdoors. Hiking helps strengthen your heart and muscles, while spending time outside gives you a chance to slow down, observe nature and notice seasonal changes.

Share Your Adventure: Share a favorite photo or discovery from your hike using #4HNatureNavigators.

BE SAFE WHILE NAVIGATING NATURE

- Participate with a family member, club or trusted adult.
- Always let someone know where you're going.
- Dress for the weather and stay hydrated.
- Be aware of your surroundings — respect wildlife and watch for hazards like poison ivy or snakes.

REFLECTION PROMPTS:

Use these as journaling ideas or discussion starters:

- What was the first sign of fall you noticed?
- What colors did you see most often?
- What surprised you on your hike?
- How was the trail different from what you might see during another season?



HEALTHY SNACK: TOASTED PUMPKIN SEEDS

Skill Focus: Think Like a Food Scientist!

Experiment with different pumpkin seed seasonings, use your senses to compare them, and pick your favorite! Turn a favorite fall activity into a tasty snack. After carving or preparing a pumpkin, save the seeds and toast them for a simple seasonal recipe.

Ingredients:

- 1 cup raw pumpkin seeds
- 4 cups water
- 2 tablespoons salt (adjust amount of salt to meet nutritional needs and flavor preferences)
- 1 tablespoon vegetable oil
- Seasoning of your choice

Seasoning Ideas:

- Ranch: 1-2 teaspoons dry ranch seasoning.
- Cheesy: 1-2 tablespoons finely grated Parmesan + ½ teaspoon garlic powder.
- Cinnamon Sugar: 1 tablespoon sugar + ½ teaspoon cinnamon. Skip the salt in the boiling water or reduce it significantly.
- Taco: 1-2 teaspoons mild taco seasoning. Choose a lower-sodium version if possible.
- Garlic & Herb: ½ teaspoon garlic powder + ½ teaspoon Italian seasoning + salt.
- Smoky BBQ: 1 teaspoon mild BBQ seasoning or a combination of smoked paprika, garlic powder and a tiny amount of brown sugar.

Food Science Activity: Divide the seeds into 2-3 batches and create and taste-test different seasoning combinations. Rate each toasted pumpkin seed combination for aroma, flavor, crunch and appearance, then vote for your favorite.

Trail Tip: Snacks can help fill nutrition gaps between meals. Think of snacks as mini-meals and choose foods from the food groups, including fruits, whole grains and protein foods.

Instructions:

1. Separate the seeds from the pumpkin flesh and strings. Place the seeds in a colander, rinse well and use your hands to separate and clean the seeds.
2. Place the water, salt and cleaned seeds in a saucepan. Bring to a boil, reduce the heat and simmer for 10 minutes. Drain the seeds, cool briefly and blot dry.
3. Preheat the oven to 300°F. Spray a four-sided baking sheet or pizza pan with nonstick cooking spray.
4. In a bowl, combine the seeds with the vegetable oil and seasoning mix of your choice. Mix well.
5. Spread the seeds in a single layer on the prepared baking sheet. Bake for 30 to 40 minutes, or until they reach the desired brownness. Stir every 5 to 10 minutes, watching more closely near the end of baking.
6. Cool before eating.

Yield: About 1 cup toasted pumpkin seeds.

Pumpkins are more than a fall decoration. The seeds inside a pumpkin can become food, and saving them for a snack is a great way to use more of the pumpkin. As you prepare the recipe, take a close look at the seeds. Notice their size, shape, color and protective outer covering.

Adult supervision is recommended when youth use the stovetop, oven, knives or hot cookware.

Reflection:

- What did you learn while preparing pumpkin seeds?
- What was one change you noticed as the seeds toasted?
- How could using parts of foods that might otherwise be discarded help reduce food waste?

Source: Oklahoma State University Extension, Oklahoma Gardening, "Toasted Pumpkin Seeds."



NATURAL RESOURCES CHALLENGE: WILDLIFE DETECTIVES

Discover which animals may be using an outdoor area by looking for the clues they leave behind.

Wildlife often goes unnoticed, but animals leave evidence of their presence. Evidence can include tracks, scat, nests, food remains, runways and other signs which are useful clues for learning about wildlife and animal behavior.

What Counts as Wildlife Evidence?

- Tracks: Footprints in mud, sand or soft soil can show that an animal traveled through an area.
- Scat: Animal droppings can provide evidence that wildlife has been present. Observe only; do not touch.
- Nests, Dens and Burrows: Shelter sites can reveal where animals rest, raise young or escape weather and predators. Again, please do not touch.
- Feeding Signs: Look for nibbled plants, nutshells, chewed seeds, bark damage or other signs that an animal has eaten nearby.
- Trails and Runways: Repeated movement may create narrow paths through grass or vegetation.
- Sounds: Calls, rustling leaves, pecking and wingbeats can provide evidence even when an animal is hidden.

Your Challenge:

- Choose a safe outdoor location like a park, backyard, school grounds, farm or trail.
- Spend at least 20 minutes moving slowly and observing carefully.
- Find evidence from at least three categories.
- Photograph or sketch each clue rather than collecting it.
- Record what you found, where you found it, what animal you think may have left it and what evidence supports your idea.

THINK LIKE A SCIENTIST

Good observation comes before identification. Record size, shape, color, location and nearby habitat features. If you are unsure what made a sign, say so. Use a field guide or a trusted university or agency resource to investigate further.

Use the links below for online educational modules:

Animal Adaptations

[*okla.st/4h-animal-adaptations*](https://okla.st/4h-animal-adaptations)

Oklahoma Snake ID

[*okla.st/4h-oklahoma-snake-id*](https://okla.st/4h-oklahoma-snake-id)

After completing the above modules, try your skills in Adaptation Investigation.

Choose one Oklahoma animal and investigate:

- What body feature helps it survive?
- What behavior helps it find food, water, shelter or safety?
- Does its behavior change in fall or winter?
- What habitat resources does it depend on?
- What evidence of this animal might you find outdoors without seeing the animal itself?

NAVIGATOR QUESTION:

An adaptation is not a superpower. What might happen if the habitat no longer provides the food, water, shelter or space an animal needs?



NATURE CRAFT: CREATE A FALL NATURE WEAVING

Turn your fall discoveries into a piece of art! Head outside to collect fallen natural materials from your yard, then weave them together to create your own fall nature display.

What You'll Need:

- 4 sturdy sticks about the same length
- Yarn or twine
- Fallen leaves, grasses, small flowers, dried plants or pine needles
- Feathers or other fallen natural treasures you find

Tie four sticks together to make a square or rectangle. Wrap yarn or twine back and forth across the frame to create rows for weaving.

Now head outside and look for interesting colors, shapes and textures. Gently weave your finds over and under the yarn to create your design.

Nature Navigator Tip: Only collect items that have already fallen when possible. Leave living plants growing and never collect from areas where gathering natural materials isn't allowed.

Make It Your Own

Try creating your weaving around a theme:

- Fall Colors — Find shades of red, orange, yellow, brown and green.
- Terrific Textures — Look for something smooth, rough, fuzzy, bumpy and delicate.
- Nature Rainbow — See how many different colors you can find in nature.
- Trail Treasures — Use interesting items you discover during a fall walk.

Skill Focus: Creativity & Observation

Slow down and notice the colors, shapes and textures in nature as you turn your discoveries into art.

THINK ABOUT IT

- What natural item caught your attention most?
- What colors and textures did you find?
- Did creating your nature weaving make you notice things outdoors that you might normally walk past?

4-H CONNECTION

This lesson supports 4-H Natural Resources and STEM through wildlife observation, evidence-based identification, habitat investigation and the study of animal adaptations. It supports 4-H Healthy Living by encouraging outdoor physical activity, mindful observation and preparation of a nutritious snack. Youth also practice life skills including observation, critical thinking, decision-making, curiosity and communication.

EARN YOUR FALL BADGE!

To earn your Fall Nature Navigators sticker badge:

1. Complete at least three activities from this lesson.
2. Take a photo of yourself completing one of the activities.
3. Answer these three questions: I liked ... I wish ... I wonder ...
4. Submit your photo and answers in your ZSuite registration with your name, address and county.



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Learn more at 4h.okstate.edu