

# Surviving in the Great Outdoors

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Do you like being outdoors and connecting with nature? Do you know how to handle unexpected situations that might come up? Learning outdoor survival skills can give you confidence to explore the outdoors and the ability to handle situations such as getting lost, bad weather, or injuries. This idea starter will help you learn skills to improve your safety and preparedness while enjoying outdoor adventures.

Being ready for the outdoors means making sure you have enough food and water or knowing where to find them. Foraging means finding and using wild plants and mushrooms for food. It is important to learn which plants are safe to eat. Foraging can help you survive in tough situations or make outdoor trips more fun by connecting you with nature.

Knowing how to start and manage fires is important. Fire can be used for warmth, cooking, and signaling for help. It is also important to prevent forest fires and preserve natural habitats. Fire-building involves using different methods, understanding how to lay fires, and choosing the right materials. You should also think about the environmental impact of fire and follow any local regulations or restrictions.

Knowing how to make or find shelters is also important for surviving outdoors. You need to know how to build or find temporary shelters to stay safe from bad weather.



## PLAN YOUR PROJECT

Use this idea starter AND publication 4-H 365 *Self-Determined Project Guide* as the starting place for your 4-H self-determined project. The *Self-Determined Project Guide* is available from your county OSU Extension office or on the Web at [ohio4h.org/selfdetermined](http://ohio4h.org/selfdetermined). You may choose to do a little or a lot depending on your level of interest. Be sure to register your project with your county OSU Extension office.



Different environments require different shelters, such as simple lean-tos, complex teepees, or snow caves. Learning about shelters includes understanding nature, the land, and practical construction techniques.

Navigation skills are important to help you move safely and find what you need to survive. Whether you are an experienced adventurer or simply enjoy spending time outside, learning navigation skills helps you to enjoy your outdoor experience even more. It is easy to get lost and lose your sense of direction. If you can read maps, use a compass, or follow natural landmarks, you will increase your ability to survive.

Thinking about your health and safety is critical for outdoor fun. Knowing first aid, choosing the right equipment, and being aware of animals can save you in an emergency. Weather can change fast outside, so be prepared with the right clothing and proper footwear suitable for hiking. Bring along things like rain jackets and extra clothing to help you stay comfortable in changing weather conditions.

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## AREAS OF INTEREST AND THINGS TO DO

Every self-determined 4-H project can be broken down into areas of interest. These are the specific things members want to address during their project adventures. Using 4-H 365 *Self-Determined Project Guide*, identify at least three areas of interest with at least three activities per area to explore. Take your ideas from the list below or make up your own.

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### Nourishing the Adventure

- Contact the Ohio Department of Natural Resources (ODNR) or your nearest state park and ask about foraging events. Go on a hike or interview an ODNR employee about edible plants native to Ohio.
- Visit the Ohio Poison Centers website at [ohiopoisontcenters.org/outdoor-safety](http://ohiopoisontcenters.org/outdoor-safety) for a list of poisonous plants found in Ohio. Choose at least five plants to include in a scrapbook with pictures and information about each plant.
- Take a hike in the woods. Identify all the possible sources of water you encounter on your hike. Not all water is safe to drink. Even fresh water can

contain harmful bacteria or viruses. Instructions are available on the internet for basic solar stills that can be constructed using a bowl, plastic wrap, and a few stones. Make a solar still and record the amount of water collected and how long it takes to collect it.

- High-energy snacks are a great addition to your hiking pack. Use this recipe to make your own energy bites: Combine  $\frac{2}{3}$  cup peanut butter (or substitute), 1 cup rolled oats,  $\frac{1}{2}$  cup chocolate chips, 2 tablespoons honey, and  $\frac{1}{2}$  cup flax seeds in a bowl. Place the mixture in the refrigerator for 30 minutes. Break into 12 pieces and roll into balls. Store in the refrigerator for up to a week. Substitute another recipe if necessary due to allergies or food preferences.
- Staying hydrated is essential to keeping your body healthy and functioning properly. It is recommended that most people drink between 8–13 cups of water daily depending on age and activity level. Keep track of your water intake for one week. How does your water consumption compare to the recommendation?



Be prepared, be aware of what is happening around you, and make good decisions so you can have fun and enjoy your outdoor adventures.

### Igniting the Adventure with Fire Safety

- Collect the materials needed to build a fire. Do a demonstration for your 4-H club on how to properly prepare a fire site and assemble the materials as if you were building a fire.
- Research at least five primitive methods of starting a fire without matches or a lighter. Create

a poster showing the materials you would need for each method.

- Many hikers make and carry fire starters in case they need to build a fire. Fire starters can be made from dryer lint, wax, sawdust, petroleum jelly, cotton balls, egg cartons, and a variety of other household items. With adult supervision, make at least two different types of fire starters and experiment to see which works best.
- Plan a meal that can be cooked entirely over an open fire. With the help of an adult, purchase the ingredients and prepare the meal. Try to use at least two different cooking methods.
- Research campfire safety on the Smokey Bear website at [smokeybear.com](http://smokeybear.com). Arrange with a Cloverbud Volunteer to lead an activity during a Cloverbud meeting about campfire rules and campfire safety.



### Shelter in the Great Outdoors

- Take a hike with an adult in the woods paying attention to your surroundings. What items do you see that could be used as shelter-building materials?
- Sometimes the wilderness provides natural shelters. Make a collage of pictures showing at least five different natural shelters that could provide cover from night or weather.
- Learn to tie at least five different knots that would be useful when constructing a shelter.
- Build a shelter using a tarp. Make a list of supplies needed and prepare instructions for someone else to follow to assemble the tarp shelter.
- Explore the importance of layering to stay warm or cool by writing an instruction card on how to dress

for hiking in three different weather conditions. For example, 32 degrees and snowing; 40 degrees and raining; and 60 degrees and sunny.

### Navigating the Adventure

- Make a list of ways to signal for help if you are lost. What 3-5 items might draw attention to help you be found? Explain to an adult how you would use each of these to signal for help.
- Locate a search-and-rescue team, fire department, park ranger, or K9 officer in your community. Interview one or more about how to find your way if you are lost in the woods.
- Use a compass to create a clue sheet leading to a specific location in your neighborhood. Include directions—north, south, east, or west—and distances—number of steps or feet to the destination. See if a friend or family member can use a compass and follow the clue sheet to the correct location.
- Find a map of your local town or county and identify the three components of distance, direction, and symbols.
- After exploring your neighborhood, draw a map with at least three landmarks—houses, buildings, school, park, playground. Label the streets and indicate north, south, east, and west.
- Download a stargazing app, such as Sky Map or Night Sky, and identify the location of major constellations. How could you use this information and the position of the sun to navigate?

### Staying Safe on the Trail

- Carrying a first aid kit when hiking is a simple yet important precaution. Research items needed in a simple first aid kit, and prepare a kit for use when hiking.
- Prepare and give a health and safety talk at a 4-H club meeting on how to treat cuts and scrapes, sunburn, insect bites, poison ivy, and other injuries you might experience outdoors.
- Identifying dangerous animals and insects while hiking is an important skill that can help you stay safe in the wilderness. Based on your area of Ohio, make a field guide or scrapbook of five dangerous animals and five dangerous insects. For each, include a picture, a method to identify it, its distinctive features, what to do if you encounter it, and how to avoid it or protect yourself from it. Another option is to purchase a wilderness guide.

- Packing a hiking pack efficiently and thoughtfully can make a hiking experience more enjoyable and comfortable. Create a step-by-step guide on how to pack a hiking pack. You can also demonstrate this at a 4-H club meeting.
- Explore and learn about weather awareness by accessing the National Oceanic and Atmospheric Administration website at [noaa.gov](http://noaa.gov). From the Education tab with an apple icon, choose and read one story or report. Write a paragraph about the topic you chose and what you learned.

## VENTURING FURTHER

### Make a Hiking Stick

#### Materials

- a fairly straight stick or branch approximately your height, sandpaper, duct tape, markers, craft feathers, glue, paint, beads, and string.

#### What to do

- Peel off the bark and sand the small edges. Decorate the stick and create your own unique hiking stick.

### Edible Fire Building Snack

#### Ingredients

- paper plate, mini marshmallows, chow mein noodles, small pretzel sticks, large pretzel rods, candy corn, red hots, and a small cup of water.

#### What to do

- Use the paper plate as a base for the “fire” and have the small cup of water handy to “extinguish” the fire. Make a fire ring (mini marshmallows) on the plate. Construct a triangle with the pretzel rods (fuel) inside the ring. Place tinder (chow mein noodles) inside the triangle. Light the tinder (red hots). Add kindling (small pretzel sticks) in a tepee shape. Add candy corn (flames) to complete the edible fire.

### Casting Animal Tracks

#### Materials

- scissors, ruler, newspaper, 32-ounce empty and clean plastic soda bottle, one box plaster of Paris, 1 quart or 1 gallon plastic food storage bag, 8 to 16-ounce bottle of water

#### What to do

- Identify an area with high levels of animal traffic. Casting works best in soft, squishy mud. Using your scissors and ruler, cut a 2-inch-wide ring from around the center of the soda bottle. Clear away any debris around the animal track. Place the plastic soda bottle ring around the track and press it into the ground. Mix the plaster of Paris according to the package directions, pour the plaster into the plastic ring, and allow to set for one hour. Gently remove the plaster cast, wrap it in newspaper, and let it dry for several days before cleaning it and observing the animal track.

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## RELATED RESOURCES

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American Hiking Society, [americanhiking.org](http://americanhiking.org)

Leave No Trace, [Int.org/why/7-principles/](http://Int.org/why/7-principles/)

Ohio Department of Natural Resources Field Guides, [ohiodnr.gov/discover-and-learn/safety-conservation/about-ODNR/wildlife/documents-publications/backyard-wildlife-documents](http://ohiodnr.gov/discover-and-learn/safety-conservation/about-ODNR/wildlife/documents-publications/backyard-wildlife-documents)

Ohioline, [Ohioline.osu.edu](http://Ohioline.osu.edu)

Wisconsin 4-H Hiking Series, [fyi.extension.wisc.edu/wi4hpublications/hiking-series-gearing-up/](http://fyi.extension.wisc.edu/wi4hpublications/hiking-series-gearing-up/)

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