Summer Fun in the Forest

By Page Hutchinson, Virginia Department of Forestry

Kids bored? Or driving you nuts? Trying to beat the heat? Getting out in the woods can solve all these problems!

I suggest you take a bucket with you for holding some equipment for investigating. Fivegallon buckets from home improvement stores are a perfect size and are durable. They can be bought for less than \$5. Or recycle a five-gallon bucket from a paint or drywall project. And you can turn it over and use it as a seat.

What might you put in the bucket?

- Field guides trees, ferns, butterflies, birds, etc. Not too many or the bucket gets too heavy. You might want to choose one or two on which to focus.
- Hand lenses or magnifying glasses.
- Bug boxes or viewers (<u>see resources</u>).
- Small plastic terrarium for temporarily holding a frog, lizard or other critter to observe.
- Gardening gloves to protect your hands.
- Small trowel and/or hand rake.
- T-shirt sweep net (<u>see resources</u>).
- Seed collection wands (see resources).
- Tape measure and 12" ruler.
- Tweezers or forceps.
- Scissors or garden shears.
- Small paper bags for collecting.
- Nature journal or clipboard with paper
- Pencils and colored pencils.

Children are excellent at finding things to investigate in the woods, but if you'd rather guide them, I'll offer some suggestions. Please begin by talking about safety with your children.



Some things in the woods like this puss moth caterpillar may appear friendly but are actually poisonous. Properly identify unknowns before touching, eating, or collecting them. Photo by James Solomon, USDA Forest Service.

It's a good idea NOT to touch any plants or animals unless deemed safe by an adult. Even some cute, fuzzy caterpillars can give you a good sting! For example, you may just want to pet the puss moth caterpillar, but don't. Beneath the long hair are numerous short poisonous spines.

To help children focus on their walk, you can start by making a pair of binoculars out of toilet paper rolls. Glue the rolls together and attach a string to go around the neck. Or insert and glue a popsicle stick in between as a handle so they can be held up to the eye. Have the children decorate their own binoculars.

Find an old decomposing log. Have the children examine it with their eyes and a magnifier. Here are some questions you can ask them about it:

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A simple, homemade, pair of binoculars, can help your children become actively involved in your woods walk, and help them focus. Photo by Page Hutchinson, VDOF.



Challenge your children to create seeds with different types of dispersal mechanisms. Photo by Page Hutchinson, VDOF. How might the tree have died? Has the tree been dead a long time or a fairly short time? How did you decide this? What kinds of animals live on the bark? Under the bark? Inside the log? Under the log? Where do these animals get the food they need? Do any plants live on the log? How can they live without soil? Why are decomposing logs important to the forest? Have the children make sketches of the plants and animals you found.

As you walk through the forest, have your children collect seeds they find on the ground. They may also want to collect the seed holders, such as cones, balls, or shells. As they collect the seeds, scan the area and see if they can identify which plants they may have come from. Either in the forest or when you get back home, have children sketch each kind of seed. Help them measure the seeds to compare sizes and improve math skills. Discuss how the seed travels to get to a new place to grow (floats on air, flies through the air, floats on water, eaten by animals, bounces or rolls away, stored by an animal, sticks to an animal, thrown by the plant, or released and opened by fire).

A great STEM challenge is to create seeds out of random materials from home (popsicle sticks, cardboard, bubble wrap, coffee filters, construction paper, rubber bands, paper clips, pipe cleaners and whatever else you can dig up).

• Design a seed that can be **thrown** a least 5 feet away from its parent plant.

• Design a seed that **floats on water** for at least 5 minutes.

• Design a seed that **sticks to an animal** and can be carried at least 10 feet.

• Design a seed that **floats in the air** for at least 5 feet.

Design a seed that an animal unknowingly **ingests**, then deposits later a distance away from the parent plant (make this one very enticing to the animal in color and smell).

If you come to an opening in the forest that has long grasses and other herbaceous plants, have the children use a seed wand to collect seeds. Have

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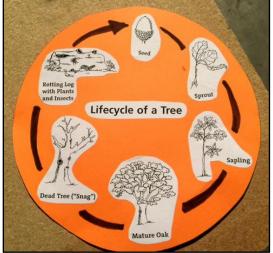
them wave the wand through the grasses and the seeds will stick to the microfiber cloth on the end. Add those to their seed collection.

In fact, as you're walking through the forest, encourage your children to collect small bits of things from the forest that catch their eye so they can make a forest picture: lichen, interesting leaves, sticks, seeds, mosses, small rocks, snake skins, and so on. I recommend using a piece of cardboard as the base for the picture since the objects tend to be too heavy for paper. Tacky Glue or even a wood glue tends to work best, but regular white school glue is fine.

To help your children understand the lifecycle of a tree, you can identify all the stages of growth in the forest as you're walking. For example, if you find an acorn, you know this will grow a new oak tree. Near where you found the acorn, see if you can find a sprout. Now look for a sapling, a mature oak, a dead oak, or one that appears to be dying, and a rotting log. Children can draw the life cycle of the tree with arrows in between (when the tree is about 1-4 inches in diameter at 4.5 feet from the ground, it is considered a sapling; a mature tree is greater than 4 inches at 4.5 feet.)

There are so many more amazing investigations to do in the forest! Design some of your own. I hope you have fun.

These activities are all adapted from Project Learning Tree's *K-8 Environmental Education Activity Guide*.



After looking at different stages of tree growth in the woods, have children diagram the lifecycle of a tree. Photo by Page Hutchinson, VDOF.

Please contact the author with any questions about Project Learning Tree.

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