

Young Naturalist Program: A Typical Day by Dan Bera and Hannah Marty

At the Young Naturalist Program here at Neilson Spearhead Center, youth in 2nd-12th grade learn about and explore the natural world around them. We seek to give the kids more tools to use in their toolbox to understand the world. If there were such a thing as a typical day at camp it might look something like this:

Arrive and get settled in, placing your lunch in the lab to make sure the squirrels don't get it while we are off on the trail, then come to sit in the screen porch to tell jokes and listen to a story as the rest of the kids for your week arrive. Since the weather is beautiful today with little wind, the Naturalists have decided that today would be a great day to practice canoeing. So, you learn about how to canoe, and then pack up your lunch and water bottle, grab a life jacket from the rack on the wall, and make sure you have a paddle that fits, before going down to the water to get into a canoe with your partner.

Today is a full day of exploring, and you start by paddling across the lake to see some really cool mushrooms that Dan found while doing trail work the previous day. He tells you about different features of mushrooms that can help you tell if the mushroom will be edible or not based on keys such as if there are gills on the underside, or a ring around the base. Of the two you happen to see today, one is poisonous and one is an edible fungus that covers a mushroom that may or may not be edible, but you can't tell because the fungus is so thick, so he tells you that it would be a good idea not to guess and try eating it. "Only eat mushrooms if you are 100% sure of what they are" he says. Then it's back to the boats for more canoeing, this time in the shallows so you can see aquatic plants and some little fish and learn all of their names. In a nice spot you get all of the canoes together, and then you all have a snack- it's probably trail mix. While you eat, you hear a story about the Wanagitchee, a mythical water spirit that some say live in the lake here, but it has never hurt a person, it has just been curious about them and sometimes eaten the fish that people catch in the lake, you finish your snack while hypothesizing with your fellow campers about what it looks like.

Your next destination is the South Access where you pull the boats up on shore and take your lunches and hike onto a trail to a spot in the shade to enjoy your food. After lunch you go onto the county land that surrounds Spearhead and play a rousing game of capture the flag in brush so thick that you can sneak all over the place and never be seen as you search for the flag. When one of the teams wins you gather back together with the group and go into the brush to see some beaver skeletons that were left there by hunter trying to bait wolves. You learn about how beaver's teeth work-always growing so they have to chew to keep their teeth down, and how they have adapted to be able to completely seal off their eyes, ears, noses, and mouths when they dive and chew underwater. Then it is time to canoe back to the lab so that you can go for an "Underwater Aquatic Exploration" before you have your afternoon snack and head home, tired, but excited for the next day!

Sight:

We all use our eyes as our primary resource to explore the world around us. Here at camp we work to hone our vision to see the little details that help us to identify things. Here are some of the things we learn to identify and discern between as we roam around the Spearhead property. When comparing and contrasting plants we often look to the leaf shape to help us know what we are looking at, spear shaped leaves are an indication of Sheep Sorrel (a favorite snack), heart shaped leaves could be Sour Sorrel or Wild Ginger depending on the size and location of the leaf, round lily pads in the water mean White Water Lilies, oval shaped lily pads mean Yellow Lilies if they are big, and Pond Weed if they are small and finally, three green leaves joined together with red in the center-our friend Poison Ivy. We can tell the differences between spiders by their size and the markings we see on their abdomens, Nordman's

Orb Weavers have bumps on their abdomen and a pattern that looks like a skull, Zebra-Butt Spiders have black and white striped abdomens, and Crab Spiders tend to be the same color as what we see them on with white stripes on the sides of their abdomens. We also look at the scat we see on the trail because what we see in the scat can tell us who dropped it, what they have been eating and what is ripe in the woods. Finally, sometimes we see a big cloud of tan and brown seeds when we get a cattail puff in our face.

Sound:

Sometimes out in the woods we are making so much noise that it is hard to hear anything that isn't loud, or right next to us. To help us learn to listen, we have two Listening Circles on our trails, and we will also use other wide spots on the trail for listening time. For youth in 2nd-6th grades we challenge them, as a group, to sit in silence for three minutes, closing their eyes so their other four senses are heightened. For our older youth, we place them alone along a trail for half an hour after their overnight camp so that they can experience the woods alone and quietly. These times have resulted in campers having squirrels run over their legs, birds land right next to their faces, and truly hearing a forest without humans, sometimes for the first time. After their silent times we gather together as a group to talk about what we experienced and heard. The first thing mentioned is often the sound of deer fly or mosquitoes buzzing, but after that we talk about other sounds of the forest such as the birds and the wind. When we discuss birds we often talk about the mnemonics that we can use to learn calls such as the "Teacher, teacher" of an Oven Bird or the "Po-ta-to chip" of a Goldfinch. Wind is always fun as we learn to distinguish between the roar of wind in the pines and the rustle of wind through deciduous tree leaves, and from there we can understand what trees are around us, even with our eyes shut! Other memorable sounds from camp are the sound of whirly-gig beetles scattering on the approach of a canoe, the popping sound of Bladderwort snapping shut when it is lifted from the water, and the sound of people sneaking around in the woods during games of Camouflage and Capture-the-Flag.

Smell:

Smells of the woods can either be wonderful, or not so great, but either way we experience them all and learn from them all. Though our noses aren't as powerful as many other animal noses, the things we smell can tell us a lot about the places we are in. Two of our favorite smells we commonly notice during our silent circle times, and those are the smell of the lake and the smell of the pines. We can use those to tell us about how close we are to the water, what direction the wind is blowing and how hard the wind is blowing. We also can use our noses to tell us how close we are to the bog, and if there are any decaying mushrooms anywhere near us-they tend to smell like rotten flesh. Furthermore, we use our noses to tell us that the smell of Skunk Weed is indeed quite skunk like (Better throw that ball of plant stuff that we pulled off the bottom quickly at someone else!), that Lemonade Ants smell (and taste) like their namesake, and to help us to identify different plants. One of these is Yarrow which has a distinct smell that we want to remember since Yarrow can be used to stop bleeding and help with bruising-a useful plant in the woods. Finally, we occasionally use our noses to find things like Otter Scat- a smell like none other, and to determine that yes, we did last wear those socks when we hiked up the Amazon River!

Taste:

One of the compound questions we hear the most at camp is "What's that? Can I eat it?" For a lot of the plants the campers are pleased to hear that the answer is "Yes". With our older campers this year we spent one day talking about what plants are best for tea, and then going out and collecting our own Spearhead blend to have with lunch that day. Among the favorites for tea are New Jersey Tea,

Raspberry, Strawberry and Blackberry leaf, White Cedar and Mint. Also tasty along the trail are Balsam Fir needles (“Taste like Christmas as long as you don't have a plastic tree”), Wintergreen and, Giant Blue Hyssop (“Black Licorice” plant, beloved also for making a rollup- place a berry inside a leaf and then eat the two together). Less beloved along the trail, but still eaten are Dog-Tongue Lichen (“Stale Tortillas” was one camper's description), White Willow (“A taste you will truly never forget!”, also a source of natural pain killer), pine pitch, and Wild Ginger. There are also some plants that we eat from top to bottom with Cattails being one of them. We sample Cattail root, base (sort of a spicy cucumber flavor), pollen (nutty, and a good hair dye if you want quick yellow/green bog monster hair), and the green unripe tops. Finally, after the older campers have completed their all day walk around the lake, nothing tastes better than our boiled soup dinner.

Touch:

Touch is one of the senses that we tend to use less consciously than other senses. Indeed, the main way we move through the natural world is by walking and our feet are nearly always covered by shoes which close us off from some of the information we could be receiving about our surroundings. We don't run around barefoot all of the time here at camp, that would be a safety hazard with all of the Poison Ivy on the trails, but we do try to handle those things that we can safely handle. Favorite camper feels include Cattail Fluff (soft and an excellent insulator), horse leeches (a non-blood sucking leech that feels like smooth jelly in your hand), Jewel Weed (its juice soothes the pain of nettles, mosquitoes and deer fly bites), frogs and toads that we find (though a Toad might pee on you, and we need to be sure to place them back in their habitat, not take them along the trail with us) and the cool water of the lake after a long hike or running game. Less favorite interactions are with pine pitch (especially in hair), Stinging Nettle, Algae (some love how soft it is, some think it is slimy), Jelly Fungus and Blackberry and Raspberry spines when they meet your legs and arms hiking up the Amazon or running away from someone during Capture-the-Flag. Other times we use our hands to feel are when we pick up mud before we throw it at someone during our Mud Fight, and to feel how soft the feathers are that we find dropped along the trail. Touch also helps us with a blind walk that we do where the kids need to follow a rope along a section of the trail around trees and through the bushes to get to the end. This brings us to a discussion about how animals use their sense of touch to navigate, and how we are so used to using all five of our senses at once, that having to trust one sense more than others can be scary if it is not a sense that is normally used heavily. These discussions help us to identify with other animals, and understand why other animals act in the ways that they do based on what senses are the most strong for them.