

Virtual Outdoor Education

Lesson plans for the Fall of 2020



These lessons are laid out with no timeline in mind, but they do build content chronologically. We know that classrooms have wildly different structures this year, and are relying on teachers to adapt these lessons so that they'll be most useful to them. Use them virtually for both synchronous and asynchronous days, or adapt them for working with kids in person. These lessons are simply a jumping off point - take them and make them your own! If you create an activity or lesson that you'd like to share with us, please do. We're always excited to see what you do!

This lesson set was written in partnership with elementary school teachers in Madison, WI. The teachers we work with will adapt these lessons to fit their kids, whether they're in 1st grade or 4th. We know you'll alter the lessons to fit your class too. If you'd like help adjusting the lessons to your grade level, send us an email.

These lessons also introduce sit spots and storytelling in the first few weeks, then those lessons aren't mentioned much later on. Please visit our resources on building routine (<https://madisonaudubon.org/blog/2020/8/11/teaching-outside-outdoor-routines>). Pick the routines that work best for you and repeat them as often as you're able. Routine activities are always a good foundation to begin or end your lessons with.

This is a working document. There are likely typos and spelling errors. Please only contact us about it if it reduces clarity (education@madisonaudubon.org). We'll be adding to this document and adjusting content that's already posted as the year progresses. Please check the version you downloaded with the "update date" below.

Part 1: Introducing Outdoor Learning, Thinking Like a Scientist, Nature Journals, and Habitat.

Part 2: Who lives here? Birds, Mammals, Insects, Herpetiles.

Part 3: To Be Determined!

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Part 1: Introduce Outdoor Learning, Thinking Like a Scientist, Nature Journals, Habitat.

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1. Talk about spending time in nature/introduce outdoor learning
 - a. Discuss how people spend time in nature
 - i. Usually: sports, picnics, commuting, hiking, swimming, BBQing, boating, fishing, hiking, camping, hanging out with friends.
 - ii. Now: Natural spaces are a place to be safe outside home. Out in nature with only household members? Are you visiting playgrounds like before, or has that changed? Do you visit with people outside of your household if you're outside?
 - b. Discuss how nature makes you feel.
 - i. Relaxed? Happy? Anxious? Nervous? Home? Uncomfortable? Peaceful?

- ii. Do you notice any changes in how nature makes you feel since COVID?
- c. **This year we're going to be spending a LOT of time in nature.**
 - i. It will be a fun to explore outside away from screens
 - 1. Paying attention to nature will give us fun stories to tell each other when we're together (virtually or in person later this year).
 - 2. Nature has SO much to teach us, and there's something for everyone. Bugs, birds, mammals, lizards, plants, clouds, rocks → there's always something new to learn.
 - d. If you CAN get outside (with a grown-up, sibling, or safely by yourself) please do. Find spots you like and keep going back to them.
 - i. If you can't get outside, we'll have fun things you can do looking out of a window.
 - ii. **CHECK with kids & families to see who can get outside and what their restrictions might be**
 - iii. **CHECK to see if dirty clothes will stress family life (coin shortage & laundromat struggles)**
 - e. Activity suggestion: Talk, draw or write about how you like to spend time in nature. Share with the group.
- 2. Introduce Sit Spots
 - a. See the end of this document for tips on HOW to do a sit spot.
 - b. We have a video demonstrating how to do a sit spot. Find it on our Facebook page: <https://www.facebook.com/MadisonAudubon/videos/317865916109049> (it'll be on our YouTube channel and website soon).
 - c. Do a sit spot together via zoom. Maybe find a nature camera (national parks cams, feeder cam, trail cams, etc) that you can screen share for the kids. Talk them through what you're thinking about: what you (might) feel on your skin, what you hear, what you see, what you (might) smell, what you feel in your heart.
 - d. Ask kids where their dream sit spot might be (waterfall, on the moon, etc). Then ask where they might ACTUALLY do a sit spot.
 - i. Have kids find a spot to do a sit spot by themselves. It could be inside at a window or outside. Then have them do their own sit spot. Start with only a few (2-3) minutes, depending on age/attention span. Or just tell kids to sit for as long as they're comfortable and having fun. This will likely be something you do asynchronously.
 - ii. Create some kind of check-in: if you've introduced nature journals already they could write or draw about it. They could post a video where they share something they saw/heard/felt. You could just talk about it the next time you're all gathered.
- 3. Share stories
 - a. Teachers: begin building this into your week however you like moving forward throughout the school year. The easiest way is to start or end each week with a group share.
 - b. Begin building routines: tell kids that each week we'll share nature sightings - so everyone needs to start collecting stories to share! Any time you're outside (walking to the car, actually going on a walk, playing in your driveway, etc) or looking out of the window be ready for a cool nature sighting. Try to remember what you see so you can share with friends!
 - c. Teachers: share a cool nature sighting from the last week or so. Talk about what you saw, but also what you wonder / think / wish / guess
 - d. Ask kids if they have any stories to share. Share via zoom or another platform like Flipgrid/seesaw.

- e. Scavenger hunt: find something that you can tell a story about
 - i. Either a true story- something you saw (example: this feather fell out of a bird while it was flying over my house)
 - ii. Or an imaginary story (example: a chipmunk uses this flower like an umbrella when it's rainy out)
- 4. Introduce wonders / asking questions
 - a. Scientists make observations: they look and listen and remember. They learn from what they see and hear.
 - b. Scientists ask a LOT of questions, then they try to find the answers. Maybe they look up answers in a field guide or other book, maybe they find them online or do an experiment to find the answer.
 - c. Asking questions is the MOST important part of being a scientist. We'll practice this during our school year. We'll be noticing things that make us wonder.
 - d. Have kids share something they wonder about their sit spot.
- 5. Introduce Nature/Science/Outdoor Ed Journals
 - a. Discuss why journals are important: scientists write things they notice, things they wonder, and things that are cool. They might also draw pictures or diagrams (pictures with labels). It helps scientists remember what they've been thinking about and what they've learned.
 - b. Explain what kind of things you'll have them write/draw in their journals
 - c. Options:
 - i. Write their name on it (do you have science teams/groups? Write this too!
 - ii. Decorate the covers/first page?
 - iii. Make a first entry: draw pictures of their sit spot, write down a wonder about their sit spot
 - d. Observations Scavenger hunt: Go outside, find something soft, hard, rough, smooth, fuzzy, stiff, pokey, yucky, cool
- 6. Wonders Scavenger hunt: Go outside, maybe for a walk or just to sit. Write down 5 things you wonder (adjust the number of wonders for the age of the kids. You could also have them record their wonder via Flipgrid/seesaw)
- 7. Introduce Phenology - the study of how things in nature change throughout the year.
 - a. Example: in spring, trees have buds that grow into leaves, in summer, trees have green leaves, in fall the leaves change colors, and then fall off, in winter trees have bare branches and sometimes have new buds visible - just waiting for spring.
 - b. We will watch and record phenology this year. It'll be fun to see how our world changes as the seasons change.
 - c. Have kids think of something they could watch for as summer changes to fall (changing leaves, birds moving, insects less visible/abundant, temperatures dropping, first frost)
 - d. Initiate frost watch: Frost happens when the dew on the grass freezes at night. You can see the frost in the morning: the grass looks all glittery in the sunlight. Tell kids that as temperatures start dropping at night, we'll start watching for the first frost. With lots of people watching for it, hopefully we'll catch it on the first night!
 - e. Phenology journal entry: bring your nature journal to a window or outside. Draw something that you can see RIGHT NOW. What do the leaves look like now? Do you see any plants? Birds? Insects? Make a drawing. Write about it. Share it!
- 8. Talk about habitat
 - a. Habitat is home.

- b. Where an animal finds food, water, shelter. (humans are animals too!) We all need our habitat to survive.
 - c. Have a kid suggest an animal. What kind of food, water, shelter does it need? How does it find what it needs? You could also do an example with people here.
9. Introduce different types of habitat:
- a. Ask what kinds of habitat you can find in Wisconsin (or wherever you are): Forest, grassland, shrubby, lake, river, stream, pond, rural, suburban, urban, parks-for-nature, parks-for-people.
 - b. Explore one or two different kinds of habitat:
 - i. Maybe give them some local parks to visit with family (walking distance of each school?)
 - ii. Maybe offer some web cams they could check out for different kinds of habitat.
 - iii. Maybe read a book during a zoom OR make a video of a book reading? Over and Under the pond would be good.
 - iv. Do a sit spot, journal about what kind of habitat the sit spot is in.
10. Journal: draw an imaginary type of habitat. Include an animal (real or imaginary) that lives there, and show what kind of food, water, and shelter its habitat provides.
11. Biotic & Abiotic
- a. Habitat is made up of biotic (living) and abiotic (non-living) factors: plants, rocks, soil, microbes, animals, etc.
 - b. Have kids share about their indoor habitat - find one biotic/abiotic factor. What makes it special to them? What other living things do they share this habitat with? Are all of them "invited"?
 - c. Have kids share about their outdoor habitat - find one biotic and one abiotic factor. what do they like about it, what don't they like? What other living things do they share this habitat with?
12. More biotic & abiotic
- a. Have kids share nature sightings from the past week: ask kids to identify one biotic and one abiotic factor in their story.
 - b. Think about the three things habitats provide: food, water, shelter. Which ones are usually biotic? Which ones are abiotic? Can any of those be BOTH biotic and abiotic? Example: Food is biotic (except for animals that get minerals they need from licks or grit), water is abiotic (but what about all of the tiny things in water that animals drink without knowing it?), shelter is usually abiotic. . . .but some parasites live in or on another animal!
 - c. Habitat explore: go outside. What kind of habitat is it? Look for or think of an animal that could live in this habitat. Can you find/see its food, water, and shelter? If not, where do you think it finds those things? Write down something you wonder. (find a way for your kids to share this: either in seesaw/flipgrid or via nature journal)
13. Find something you can put on the ground to make a circle (a hula hoop, piece of rope, a belt, two beach towels). Go outside, make a circle on the ground. You can pick any place you want. If you can find a spot with soil or plants, that will be more natural than pavement or concrete. If you need to pick a manmade surface, try to find a place where plants are growing through the cracks! The circle should be about 2 feet across (wide enough for you to sit in if you wanted to). Be a scientist and make observations about what is inside the circle. Use your journal to draw what you see and write down wonders.
- a. Are there plants in the circle? What kind? What do they look like?
 - b. Are there insects in the circle? What are they doing?

- c. Is there any water in the circle? Is it solid, liquid, or gas?
 - d. Do you see signs of other animals in the circle? Which ones? What kinds of signs?
 - e. KIDS: try to remember exactly where your circle is so that you could put it back again later. We will come back again to see if anything has changed.
 - f. TEACHERS: do this exercise at different times during the school year - compare and contrast as the seasons change.
14. Be a scientist:
- a. Go or look outside. Find a biotic factor. Draw it in your nature journal. Write down one thing you wonder about it.
 - b. Repeat for abiotic factor.
 - c. Share what you found with one other person (either in person or virtually)
15. Human Habitat.
- a. Humans need food, water, and shelter too. Are there different types of human habitats in Madison?
 - b. Lots of different levels:
 - i. city vs suburb
 - ii. house vs apartment vs community shelter. Some people don't have one home they always live in, but move around to many homes, living with friends or relatives. Some people live in cars or tents.
 - c. What are some things that make human habitats easier to live in? Harder?
 - i. Easier: access to food, steady shelter, clean water, supportive family/friends/community.
 - ii. Harder: food deserts, inconsistent shelter, unsafe water, not having friends or family nearby, not having community support
16. Habitat struggles for humans ** adjust this lesson to fit the needs, age, and ability of your class**
- a. What are some things that happen that can make finding food, water, or shelter harder for people? Think about big things that are happening in the world right now. Do any of them affect how people find the things they need to survive? [Let kids lead this discussion. Make it an opportunity for kids to bring up some of the big, scary things that are happening: fires, hurricanes, riots, police brutality, racism, global pandemics, storms, flooding, climate change.]
 - b. What are some things that people do to help people who are having trouble finding food, water, shelter?
 - i. Friends/relatives taking care of people who need help
 - ii. Food drives
 - iii. Community centers providing meals
 - iv. Donating bottled water
 - v. Shelters = homes for families
 - vi. Vote for leaders who will help improve the lives of people.
17. Humans & wildlife habitat
- a. Humans have huge impacts on wildlife habitat: we can help and we can hurt.
 - b. What are some things humans do that hurt wildlife habitat (make it harder for animals to find food, water, shelter)?
 - i. *adjust for the age of your kids!* Anything along the lines of: clearing habitat for land for agriculture or housing/cities, using chemicals in agriculture industry, mining/mineral extraction, removing & burning oil/coal/fossil fuels, etc.
 - c. What are some things humans do that help wildlife habitat (make it easier for animals to find food, water, shelter)?

- i. restoring/creating new habitat, cleaning up & improving existing habitat, anything we do to reduce reuse recycle, using as little (or no) chemicals as we can in agriculture,
- d. Think of your habitat: your yard, your neighborhood, your city. What is one thing that people could do to help nature? What is one thing that people are already doing to help nature?

SIT SPOTS

Sit spots are a great way to teach kids how to sit and observe nature. They can be done anywhere: it's best to be outside, but you could do this while looking out of your favorite window. To maximize usefulness of the sit-spot experience, follow these steps.

1. Have the kids spread out in the natural area you're in. Set boundaries for where they're allowed to go if the space is large! Tell kids that they should choose a space where they feel connected with nature. They should be able to sit comfortably there for a few minutes. Bring a plastic bag or a piece of tarp if it is muddy.
2. Tell kids that we'll be sitting in their spot for 2, 5, or 10 minutes, depending on their age. You can adjust during the sit spot if you need to.
3. Before you start, set an intention for the sit spot. You could have kids just sit and soak it all in. They could try to remember all of the natural or human-made sounds they hear. They could count bird songs or look for insects. Choose whatever you think will get them excited about their spot.
4. Give kids a decisive start time, and update them when they're half way through and when there's 30 seconds left. This will help them make it to the end of the sit spot. You might also decide to pair this with a nature journal. Kids could write in their journal during the sit spot or after the time has passed.
5. When the sit spot time is up, everyone should share their experiences. Be excited, so that the kids will catch your enthusiasm. Discuss what the kids observed and how they felt. Was it easy or hard to sit still for so long? Were they comfortable? Would they pick the same spot again next time, or change to a new one?

Building ritual:

Sit spots are an amazing tool for building nature routine into your life. You could return to the same spot each time, or pick a new one. You could do this daily, weekly, or whenever you happen to be outside.

Created by Coyote's Guide to Connecting with Nature, with adaptations from Madison Audubon