



About Annie's BIG Nature Lesson

Annie's BIG Nature Lesson is an environmental education program that brings children, parents, and teachers into the natural world for learning. This five consecutive day study trip is conducted at community nature centers and invites participants to immerse themselves in exploration of different habitats, learn with experts on site, observe and write for an hour each day, and make a positive difference through stewardship projects.

The Mission

- To immerse children, teachers, and parents in the beauty and wonder of the natural world
- To engage in authentic scientific investigations by observing the local ecology, drawing, and writing
- To nurture citizens who value and protect natural resources
- To build school and community partnerships that inspire responsible environmental stewardship

Ann Mason

Annie's BIG Nature Lesson is named in honor of Ann Mason, environmentalist from Clinton County, Michigan, who devoted her life to taking care of the environment and educating the public about their responsibility for stewardship of the earth.

Dahlem offers twelve Naturalist-led Lessons, plus stewardship service project ideas for teachers to select from for their ABNL week at Dahlem, Jackson's Nature Place. Teachers coordinate with the Naturalist Educator to choose four subjects (one program per day) and one stewardship service project appropriate to season and availability.

- **Aquatic Studies** (pond and stream) – use nets, macroinvertebrate guides, discuss what aquatic insects tell us about water quality. If available, a trained volunteer will teach Enviro-Scape surface water lesson in place of teacher lead lesson.
- **Bird Study** – identification (size, color, beak and feet, call, flight pattern, diet, predator/prey, habitat, etc.). Bird Beak Activity; use various tools to represent different bird beaks to determine bird's diet (seeds, insects, meat/animals, aquatic, plants, etc.). Discuss and observe real bird nests (materials, structure, habitat, etc.), and then students will participate in nest building and forging for food simulation. Students will receive instructions and use binoculars on their teacher lead birding hike. Ideal program for fall and spring migration and winter seasons.
- **Debris Shelter Building** – why, when, where, how, and have students in teams of 5 or 6 to build a debris shelter in the woodland habitat. The students love this lesson! Engineering
- **Monday; Discovery Hike** – to orient students, teachers and chaperones to Dahlem's many trails and grounds. The Naturalist Educator will lead teaching moments while on the trail walk, and suggest areas for weekly activities and observation spots. *Recommend Monday morning.*
- **How to Build an Animal** – How do beavers build their lodges and dams? Are all bird feathers the same? Do snakes lay eggs? Students explore the fascinating array of animal adaptations and how each characteristic help species survive in the challenging Michigan environment. Discussion and interactive hands-on activity.

- **Insects** (ideal for Fall) - discuss insect parts and functions, go on an Insect Safari field study activity; use insect identification key, field nets, bug boxes and field guides. Beneficial and harmful insects. Migration, hibernation, adaptation.
- **Map and Compass Lesson** – students will receive basic instructions on how to use a compass and how to pace, then will practice these lessons. Basic mapping instructions will support teacher lead lesson; students make a map in their journals of a selected site on Dahlem property (woodland, grassland, wetland, Natural Playscape, garden area or some other location). Could also make a 'sound' map.
- **Michigan Mammal Skins & Skulls and Adaption Study** in Dahlem's Dutcher classroom - students participate in Michigan Mammal Exploration hands-on activity. Study real Michigan mammal pelts, skulls, scat collection and more. Teacher leads skull study, drawing, and journaling at our Jackson Rotary Pavilion.
- **Plants; Native vs. Non-Native** – what is the difference and importance of native vs. non-native. What is the impact, biodiversity, competing, pathogens, economical factors, pesticides/herbicides, health of wildlife and people, etc. What can you do? (This pairs perfectly with the Stewardship Project pulling invasive plants.)
- **Predator-Prey Relationships** – discuss what predator and prey relationships are and how beneficial they are to the environment. Play a carrying capacity outdoor interactive game. The game will be played 2 or 3 times changing some of the details for different outcomes.
- **Soils** – hike to different habitats to take soil core samples and compare differences; do they have the same compounds, smell, feel, etc.? What organic matter make up top- and sub-soil? What is erosion? Who and what are nature's recyclers? Discuss the importance of soil and the numerous uses and benefits it has.
- **Stewardship Service Project** – pulling invasive non-native plants (garlic mustard, bittersweet, honeysuckle, autumn olive, etc.) reinforces the importance of removing non-native invasive plants, enlarge Natural Playscape area, spread woodchips on Natural Playscape, prepare trail route and skit areas for Goblin Walks event, and clear area around and wash trail signs and benches. Other projects may become available as needed. Some projects are seasonal.
- **Tree & Plant Study** – parts of the tree and their function, identification, coniferous and deciduous, exploring Monocotous and Dichotomous keys, native vs. non-native, importance of trees and plants (renewable resource, oxygen, supports wildlife habitats, ecosystem, food, medicinal, and so much more!). Trail walk to use mono-dicot keys to locate different tree species, observe characteristics, and share interesting facts (i.e. boiling cedar greens makes a tea high in vitamin C to cure scurvy).

If there is another subject or idea you have, please share your thoughts and ideas so we can meet and develop an appropriate lesson.

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