

Four Winds Nature Institute

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INFORMATION FOR NATURE PROGRAM VOLUNTEERS

Welcome to the Four Winds Nature Program! We are a community of learners—adult volunteers and children—exploring the nearby natural world together. Nurturing a child's sense of place, wonder, and scientific curiosity is important work, and it is the dedication of the school's Nature Program volunteers that makes this happen. Thank you!



As Nature Program volunteers, you and your teaching partner(s) will present monthly lessons to K-6 elementary school students. Kids love taking part in these science lessons, having you as a guest teacher, and exploring nature outside in the schoolyard.

To prepare, you will attend a two-hour workshop led by a Four Winds naturalist-educator prior to every lesson. Training workshops will be held outdoors to the extent possible with hands-on activities to help you learn the subject matter. We'll discuss ways to present the lesson to children outdoors and strategies to make each lesson engaging and effective for the age group with which you are working.

Your school's Nature Program Volunteer Coordinator will be your main point of contact with Four Winds, ready to respond to your questions and concerns. You and the other volunteers will put together the props, games, and materials you'll need for each lesson. Four Winds provides the curriculum online at nearbynature.fwni.org where you'll find background essays, puppet show scripts, activity descriptions, plus resources for teachers (be sure to get the password from the Volunteer Coordinator to access Materials and Resources, and please do not post the password publicly).

At the start of the school year, you'll meet with the classroom teacher and schedule the year's visits. You should talk with the teacher before each lesson about what the students will learn, which activities you'll lead, and how the teacher might assist you. Each unit includes resources for teachers. The Teacher Resources page for each lesson identifies the lesson's standards—all of our lessons support the *Next Generation Science Standards* (NGSS) and the *Common Core*—and includes suggestions for integrating the Nature Program into the curriculum. In addition, we've created a Nearby Nature from Home or School outline of activities for each lesson that provides ideas for teachers to extend natural science learning and time outdoors. There is a great deal that classroom teachers must teach, and school days are packed, so it is important that our lessons provide valuable science education to students. Your good preparation, enthusiasm, curiosity, and creativity make this happen. **Thank you for being part of this learning community!**

KNOWING YOUR SCHOOL'S POLICIES AND PROCEDURES

There are different policies for volunteers and guest presenters at every school, on subjects including confidentiality, background checks, and health and safety protocols. Volunteers should be familiar with school policies. As a rule, volunteers are there to work with children in small groups (it is never the case that a Nature Program volunteer is assigned to be alone with a student) and to help the students achieve the lesson goals and standards. **Classroom teachers are responsible for the safety of the students and are expected to stay with the class when Nature Program volunteers are presenting.**

PREPARING FOR THE LESSONS

Attend the training workshop!* This is the best way to prepare yourself for leading a successful lesson. If you can't attend, make sure your teaching partner can.

Read the background information for the lesson and consider doing a bit more research so you'll feel comfortable with the children's questions.

Many additional resources are available under each theme on **nearbynature.fwni.org**, such as:

- Unit Summary, Teacher Resources page, slide show scripts, puppet show videos, diagrams, data sheets, illustrations, and Nearby Nature from Home or School in Materials (password protected)
- Vocabulary for Children in **Table of Contents**
- Children and Adult Bibliographies, nature journal cover, and student certificate in **Resources** (password protected)

Keep in touch with your Volunteer Coordinator regarding lesson scheduling, materials, school policies, etc. Remember to add your lesson schedule to the school-wide Nature Program schedule at the beginning of the year.

Remember to share the lesson plan, Teacher Resources page, and Nearby Nature from Home or School with the classroom teacher every month! Throughout the year, check in with the teacher for ideas and suggestions for making these lessons as effective as possible.

2

^{*} Although our program is designed for children, our adult volunteers need the time and space to focus on learning an in-depth topic in a short time. Thus we ask adults not to bring children to the workshops. We know exceptions are sometimes necessary, but talk first as a group about childcare arrangements.

WORKING WITH YOUR TEACHING PARTNER

Meet with your partner a few days before the lesson so you can:

- be clear on what you all want the students to learn that month;
- choose the activities you'll include and the order in which you'll present them;
- decide who will lead each activity and who will distribute/collect materials;
- write down an outline of your presentation and note who is doing what; consider your transitions, plan review questions you'll ask, and how materials will be handed out. You may need to prepare and bring in additional materials, such as pressed flowers, leaves, etc.
- plan to meet at least 30 minutes before the lesson to get set up.
- Bring your outline!

Get outside yourself and look at winter weeds, spider webs, cloud patterns, or whatever is on tap that month. This helps you learn the subject and where to look for interesting things.





Scout out the schoolyard or nearby neighborhood ahead of time. You want the children to discover things for themselves, so try to take them to a place where they will find what you all are looking for. Check the school grounds for safety, especially for poisonous plants to avoid. Arrive to the outdoor classroom site with plenty of time to set up an opening circle, stations, sit spots, etc. before students arrive. Flags, buckets, or gym cones work well to mark circle/sit spots/sharing stations.

HAVING FUN WHILE KEEPING ORDER

Although we encourage children's enthusiasm, we also need to avoid chaos. Make sure your class understands that you expect them to follow the classroom rules while you are there.

- **Hand out nametags** at the beginning of the lesson, then address the children by name. This shows respect and helps you call on them or get their attention.
- **Make sure everyone is listening** before you give directions. Then be clear and concise, and demonstrate what you mean. Wait to hand out materials until after you've given directions.



- Get the students' attention using their teacher's usual method (e.g. hand-clapping).
- **Invite** a distracted child to stand next to you. Invite a fidgety child to pass out materials.
- **Play, laugh, enjoy yourself!** Your sense of humor and fun keeps the kids on their toes.
- **Don't expect everything to be perfect**. Be open to "teachable moments" and turn mistakes into learning opportunities.
- Most of all, **be light-hearted and enthusiastic** about what you ALL are learning together. Children learn by example to appreciate nature's wonders. **Have fun!**

CLASSROOM MANAGEMENT

Feeling confident and comfortable with the students will help you be an effective teacher.

- **Set expectations and guidelines** at the start of each lesson. Let the children know that you expect their attention and respect, and that you will give them yours. Give them a brief overview of what they will be learning and doing during the lesson.
- **Keep things moving.** Jump right in with the introductory activity to capture students' attention. Alternate active hands-on activities with quieter activities so that children aren't sitting for too long.
- **Keep an eye on the time.** It's better to do fewer activities in an unhurried way than to rush through too many.
- **Don't feel you have to know all the answers.** Instead, say, "Wow, good question!" and, "I don't know—how could we find that out?"
- Ask open-ended questions and give the children time to answer them; don't rush to fill silence.
- Make sure each child's voice is heard at least once during the lesson, with a story or a
 question.
- **Give kids a chance to reflect and share.** We've included journal prompts for each lesson to encourage children to look closely, record their observations, draw, and write.

Classroom teachers are ultimately responsible for the safety of the children; defer to them if any problems arise. Teachers should remain with you and the class during the lesson. As a rule, volunteers are never alone or one on one with students. Instead, they facilitate activities and explorations for small groups of children within the physical boundaries set for the entire class.

PUPPET SHOW TIPS

Puppetry is a valuable and fun teaching tool used in nearly every lesson.

- Decide beforehand who will handle which puppets. Highlight one person's parts.
- Select a different voice or character for each puppet and make a note of it on the script (high, low, gruff, squeaky, nasal, complaining, cheerful, etc.).
- Move a puppet slightly when speaking; keep it still when not speaking. Turn a puppet quickly side to side to say "no"; bob up and down to say "yes". Be creative: even stick puppets can appear to walk, run, jump, or fly.
- Be silly! The children will listen eagerly. You will be surprised how much they remember from the puppet show.
- "THE END": Don't forget this important sign—it tells the kids when to applaud!
- After the show, review key points by holding up each puppet and asking a question like, "What adaptation does Willy Worm have to help him escape from predators?"

TIPS, TOOLS, AND TECHNIQUES FOR TEACHING OUTDOORS

Children are very curious about nature, and they look forward to learning and playing outside with you! With two Four Winds volunteers, the classroom teacher and sometimes a paraeducator, there is plenty of supervision. Strive to include time for play, exploration, science, reflection and sharing in each lesson.

Setting Up and Establishing Routines

- Pre-scout the area before you visit with children, being alert to possible dangers such as steep cliffs, busy roads, fast streams, slippery surfaces, barbed wire, wasp nests, plants to avoid, etc.
- Ahead of time, communicate with the teacher about the lesson plan, supplies for each child to bring outside with them, using the bathroom before coming outside, etc. Ask the teacher to send reminders home for students to dress for the weather.
- Arrive at the site early to allow plenty of time to set up before students arrive.
- Involve children in discussions about staying safe outdoors (i.e. "Who noticed someone being safe? Tell us about it.").
- Encourage healthy outdoor habits. Explain how to avoid insect bites and stings, recognize poison ivy and other pesky plants, and check for ticks. Go over instructions for safety and boundaries for exploration.

Preparing the space and handling materials:

- Set up stumps or hay bales in half circles for gathering together.
- String a clothesline between two trees or posts for a puppet stage.
- Use dish tubs on top of 5-gallon buckets to create stations.
- Lay out a tarpaulin for displaying materials, sorting items, or sitting on wet grass.
- Use clothesline, clothespins, and binder clips for displaying photos or diagrams.
- Use page protectors to keep handouts dry.
- Use sidewalk chalk on pavement for visuals, directions, stations, etc.
- Make homemade clipboards from reused 3-ring binder covers and a clothespin.
- Cover clipboards with 2-gallon Ziplock bags for wind and water proofing.
- Print out photos from slideshows, or suggest that the teacher show slideshows indoors before or after the lesson.

Circling up

- Circle up at the beginning of an outdoor exploration to set expectations, communicate boundaries, etc. If an activity requires re-direction, use "circle up" to bring focus back to the group and the goals of the lesson (e.g., use "I notice" statements to share what you are observing and ask for student ideas to get back on track). Circle up again at the end of the lesson for closing thoughts.
- Explain, or have the teacher explain, expectations for students' participation; you are all scientists working outside.

- Get an accurate child count ("today's magic number"); Do frequent head counts and have the students count, too.
- Create seating in a circle with stumps, milk crates, hay bales, or buckets
- Use same circle (i.e. "Each time circle up, re-circle with the same people on your right and your left."

Encourage exploration and discovery:

- Allow plenty of time and build up through the year as you all learn what to do in a sit spot and what to do free range.
- Consider group developmental needs, how much direction to give, and how to set the stage for child-directed discovery and exploration.
- Provide boundaries for children's free exploration. Mark out specific areas for different pairs/groups to explore e.g. wedges of a pie.
- Give specific and do-able prompts and be sure children have required equipment in their naturalist bags/discovery kits.
- Place an item from nature on circle spots ahead of time (one per child) and encourage
 children to make close observations of what they notice and what they wonder about the
 object.
- Divide the class into smaller groups. Exploring with a partner or small group helps a child stay focused. Plan a time and place to meet back up, and a signal to call the whole group back together. Count heads again.
- Discuss rules about collecting specimens. It's OK to pick things up from the ground (leaves, cones), but not living things (leaves on a plant), unless there are too many like it to count. As a rule, each group should pick just one specimen to bring back and share.

Give permission for children to play

- Allow time for children to interact spontaneously with the environment.
- Invite students to run, roll, jump, or slide in open space.
- Use examples from nature to play, to excite and to connect (i.e. float a leaf or a seed, waddle like a raccoon, fly like a bird).

Consider a variety of ways for children to share discoveries:

- End activities with a big sharing circle (or 2-3 small ones).
- Give students surveyor's tape to mark discoveries for others to view later.
- Collect and bring back to a sharing rope circle OR for an inside nature museum.
- Capture photos to share in a slideshow.

Consider a variety of ways to reflect and journal:

- Record (art/writing) discoveries in journals and display in an art gallery walk.
- Provide specific prompts (i.e. share something you noticed about the way insects move) and open-ended prompts (ie. share something you noticed or wondered about during the lesson.)
- Write or draw at a sit spot to journal prompts from Nature Program lessons.

Consider a variety of ways to facilitate discussion:

- Offer opportunities for all students to compose a thought and share. If a student is not ready, come back to them.
- Encourage students to think about what they learned, discovered, and what they still want to learn more about.
- Share in a circle with the whole group, in small groups with an adult, or with a partner.

ENGAGING CHILDREN IN SCIENCE PRACTICES, DISCUSSION, & LEARNING

Each unit begins by introducing a natural phenomenon that children can explore, observe, wonder about, question, and discuss, usually in small groups. During these initial explorations, adults can:

observe what children are doing, asking, and discussing;

• What is your evidence that _____(a squirrel lives here)

- engage in student learning with noticing, wondering, and thinking questions;
- use observations to frame follow-up activities.

There is sure to be energy and excitement in the air as children make discoveries and follow their natural curiosities. As adults, we can remember that feeling of joy and wonder in moments of catching frogs, collecting rocks, and gazing at passing clouds. These are the "aha" moments that tie children to their learning experiences and leave a lasting impression. Adults can channel this energy and express their own enthusiasm and curiosity by asking children about what they notice, wonder, infer, or think about the topic (suggestions below). These are the conversations of scientists. And this engagement helps children to think and feel like the scientists that they are, naturally.

What do you notice about? (the shape of the beaver chew)	
What catches your attention?	
• Can you describe this thing? What color is it/does it feel like/shape/how m	any legs?
What is going on here? What do you see/hear/smell?	
I'm surprised to see What surprises you?	Service of the servic
• I wonder	
 Your question makes me wonder. What if 	
 I wonder what it is like to be(a bird). Let's pretend to be (birds). 	1
How do you know that? (it is an insect)	

ADJUSTING LESSONS FOR AGE

Our lessons are designed for children ranging from 5 to 12 years old. Volunteers teaching kindergarten classes will take a very different approach from those teaching upper grades. After you have worked with a class for a while, it will be easy to adapt the lesson for them.

For Younger Children

- Identify just a few main points as your focus instead of squeezing in tons of information.
- Pick activities that are hands-on. Alternate sitting and moving activities in small groups.
- Choose fewer activities: the introduction, puppet show, and one activity outdoors may be plenty. You can break some activities down into smaller parts.
- Introduce and define new vocabulary as words come up.
- Be sure you have eye contact with the kids and their attention.

For Older Children

- Plan to have students work with partners (get the teacher's input on the pairings).
- Rotate students through activity stations, working with a different leader at each one.
- Spend more time on discussions, pose questions, and encourage students to make connections to other topics they have been studying.
- Give students opportunities to record their observations, take measurements, draw or write about their observations, and analyze their findings.
- Consider arranging for older children to present puppet shows to younger classes. This gives them a chance to be teachers and develop a feeling of expertise about their topic.

SLIDE SHOWS, PHOTOGRAPHS, AND SOUND FILES

Four Winds slide shows, slide show scripts, photographs, and sound files are posted on **nearbynature.fwni.org** in Materials (password protected). Slide shows are formatted in Google Slides and Power Point. Slide show scripts are useful for telling the story that is illustrated on the slides.

Sound files are available on **nearbynature.fwni.org**, and can be played directly from a device that has internet service by opening the link from the Materials page. Sound files can also be downloaded ahead of time.

PACKING UP, CHECKING OUT

- Please leave the outdoor space and/or classroom in good order—we want teachers to love Four Winds!
- **Reorganize the teaching materials** and return them to the cart, box, or shelf.
- **Replace missing or damaged items** and things that have been used up.
- Check off your visit on the school-wide calendar to keep your coordinator up to date.

WORKING WITH YOUR CLASSROOM TEACHER

You will be working closely with the classroom teacher this year as part of the Nature Program. A week or two ahead of time, meet with the teacher to discuss a schedule of meeting times and topics, as well as procedures to meet up with the class. It might help to fill out the schedule below with the teacher, and then share a copy. Feel free to share the letter to teachers on the next page to welcome and thank them and to set expectations for working together throughout the year.

DATE	TOPIC

At this first orientation meeting with the teacher, it's helpful to discuss the following topics:

- Classroom rules and expectations
- The school's Covid-19 health and safety protocols and procedures
- Allergies or other health/food concerns
- Fire Drill procedures and exits to use
- School policies on confidentiality, field trips, emergency protocols, permission slips, safety, school boundaries, etc.
- Classroom management strategies
- How students can be prepared for outdoor learning
- Any special considerations you may need to know about the students special needs, language skills, subjects of interest, etc.
- Encourage the teacher to visit **nearbynature.fwni.org**, to become familiar with the lessons and to access information about alignment with the Next Generation Science Standards and Common Core.

Teachers can help in the following ways to facilitate the volunteer-led workshops in the classroom:

- Meet with volunteers to review the month's topic and lesson plan.
- Help with classroom management and set the tone for outdoor explorations.
- Send home notices about upcoming Four Winds' workshops with reminders to children to bring outdoor clothing. And get signed permission slips for outings, if needed.
- Help assign children to groups when needed.
- Be available to lead small group activities both indoors and outside.
- Talk with volunteers about any concerns or suggestions.
- Consider ways to integrate the unit into the curriculum: share Teacher Resource pages and Nearby Nature from Home or School activity outlines to support pre- or post- workshop activities, non-fiction reading, science journals, and extend time outdoors.



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Dear Teachers,

Welcome to the Four Winds Nature Program—outdoor natural science lessons for elementary school children. Thank you for welcoming parent volunteers and community members to join you and your students in nature for science learning and discovery. Your volunteers are looking forward to presenting fun and engaging workshops to your students this year. Our lessons are aligned with Next Generation Science Standards and Common Core State Standards and provide time for students to practice important science skills while connecting with nearby nature. It is expected that you will be present at each lesson to help manage student behavior, as you are ultimately responsible for the safety of your students. Plus, your participation in the lesson is warmly encouraged as it shows the children that these lessons are an important part of the school day.

Here are some ways to support volunteers to be successful guest presenters with your class:

- Meet with your volunteers ahead of time to review the month's topic and lesson plan.
- Help with classroom management and setting the tone for outdoor science learning.
- Send home notices about upcoming Four Winds' lessons with reminders to children to bring outdoor clothing. Organize signed permission slips for off-site outings, if needed.
- Help assign children to groups, as needed, and be available to lead small group activities.
- Give feedback to volunteers and/or share suggestions or concerns with the volunteer coordinator.

We hope that you will be able to integrate these natural science topics with other lessons throughout the year. Your volunteers can provide a Teacher Resources page and a link to the Nearby Nature from Home or School activity outlines for each lesson. These resources provide extension activity ideas, vocabulary, books for kids, and outdoor learning opportunities. Establishing a few core routines in conjunction with Nearby Nature from Home or School activities will support natural science learning for your students. One routine could be to practice regular sit spots and time for observation. Or, create a journaling practice and have students take pictures, draw or write about their discoveries, find artifacts, or create a map of their findings. Or, extend a lesson by incorporating the theme into books or videos.

At the start of the school year, you'll meet with your volunteers to schedule the year's visits. Please discuss your school's Covid-19 health and safety protocols, school security, and fire drill procedures. Share your classroom rules, expectations, and management strategies, as well as any special needs, allergies or health concerns. If walking field trips will be included, please review school policy regarding permissions.

Feel free to explore our curriculum at nearbynature.fwni.org and visit our website, www.fwni.org, for professional development opportunities, to contact us, and for additional Four Winds resources. We'd love to hear from you!

Thank you, and kind regards,

Emily Pals

Four Winds Educator/Program Coordinator

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