

Four Winds Nature Institute
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FOUR WINDS VOLUNTEERS

Welcome to Four Winds' natural science programs! Here is a chance for you to engage in the education of the young people in your community, while also increasing your own knowledge about the natural world. There is a commitment in time – perhaps five to ten hours a month – and the rewards are great. By volunteering, you become part of a community of learners seeking to explore nature together, to unravel its mysteries, and to become engaged in its care and preservation.



As a Four Winds Nature Program volunteer, you will attend monthly workshops led by a trained naturalist-educator. Each workshop looks at nature in your own community – your schoolyard,



backyard, or nearby natural area. In these fun and engaging workshops, you will participate in both indoor and outdoor hands-on activities that help you to understand the subject matter and how to present the lesson to children. Through discussions, puppetry, questions, play-acting, and outdoor exploration, you will become thoroughly familiar with the topic. As a whole group, we'll discuss teaching techniques and ways of interacting with students so that your in-class workshops are light-hearted, fun and effective. The topics are designed to help students achieve the national and state science learning standards and learn important science skills.

For each workshop, we'll provide you with an activity outline and teaching materials. For many of our workshops, we use *Hands-On Nature* by Jenepher Lingelbach and Lisa Purcell as our primary text. Though copies of this book aren't included as part of the tuition fee, it is available in most libraries or to purchase from Four Winds or a local bookstore. Other resources such as *Project Seasons* by Deb Parrella and *Naturescope*, a series from the National Wildlife Federation, are also very useful. We'll supply paper handouts including puppet stencils, drawings, cards, and other materials that are needed for the activities, as well as some special items like skulls, galls, feathers, compasses and tuning forks that are difficult and/or expensive to obtain.

Volunteers that lead Nature Program workshops enjoy the contact with other adults in their communities, working with and getting to know children in their school, and learning about things they've seen outside and always wondered about! Teachers report that their students achieve better in science as a result of these programs, and they appreciate the assistance with taking children outside to learn first-hand about their surroundings. Children enjoy the fun and imaginative workshops, having special guest teachers in their classrooms, and most importantly, spending time outside exploring the natural world.



Checklist for Volunteers

(What you get to do!)

Attend the Training Workshop

Learn about the monthly topic at a fun workshop led by your Four Winds Naturalist/Educator. At least one member of each classroom team should attend the training workshop each month; let your partner know if you can't attend.

Meet with the Classroom Teacher

In September, schedule all your Four Winds workshops for the year with the teacher. Give your teacher a list of the workshop topics for the year and keep one for yourself. Write your workshop schedule on the school-wide Nature Program calendar. Check in with your teacher briefly before each workshop during the year.

Meet with your Partner(s)

Talk about what you want children to learn from the workshop.
Decide which activities would be best for your students.
Consider how to fit those activities into the available time in your classroom.
Plan the order in which you will present the activities and when to go outside.
Choose who will lead each activity and who will collect or distribute materials.
Determine who will provide and prepare any extra materials that may be needed.
Plan to meet at least 15 minutes ahead of time in order to organize the teaching materials.

Prepare for your Classroom Workshop

Attend the training workshop!
Read the background information for the unit.
Spend time outside getting familiar with the subject matter.
Make an outline of activities.
Plan transitions between activities.

Present your Classroom Workshop – Make it Fun!

Arrive early in order to set up.
Hand out nametags to students.
Be organized: set out materials for each activity in order; bring a list on an index card to remember the sequence of activities you have planned.
Allow time for dressing to go outside and for collecting materials.
Include a closure activity, such as a sharing circle, at the end of the workshop.
Keep a playful attitude and enjoy yourself!



Packing Up, Checking Out

Remember to leave the classroom in good order.
Reorganize the teaching materials and return them in good order to the cart, box or shelf.
Replace missing or damaged items or things that have been used up.
Check off your date on the volunteers' calendar so the coordinator will know you have completed the workshop.

Policy On Children At Training Workshops



Although our programs are ultimately designed for children, our adult volunteers need a chance to focus on learning about an indepth topic in a short period of time. Therefore, we find it's best to invite adults to attend our workshops without bringing their children along. Children tend to increase the noise level, decrease the number of questions that adults ask and adult participation in hands-on activities, and distract our volunteers from their own learning. Exceptions are sometimes necessary, we know, but in general we feel it's best if volunteers come without children.

There are a number of ways of providing childcare so that adults can attend workshops. In some towns, daycare is provided at someone's house during the training workshops, and at others, daycare is provided in the same building as the workshop (this only works if the two spaces are completely separate). Some volunteers take turns attending workshops and caring for each other's children. Some groups find high school students enrolled in babysitting classes to run daycare sessions as part of their course requirements.

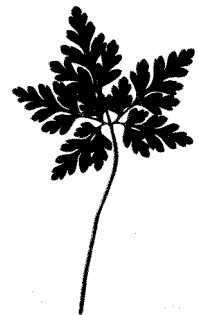
A Few Helpful Hints

Preparation:

Attend the training workshop! This is the most important step to leading a successful workshop and the best way to prepare yourself. Teachers often comment that they can tell if their volunteers have attended or not. If you can't get there, make sure your partner can attend.

Meeting with your partner beforehand is important because together you will decide what you want children to learn in the workshop, pick the activities you want to lead, and plan the order of their presentation. It's good to think ahead of time about transition questions, decide who will lead each activity, and determine who will collect materials. Remember to include a sharing circle or final activity as a fun ending to the workshop. There may be additional materials that you and your partner will need to prepare and bring in – such as food, or pressed leaves, or household items. It's important to decide who will bring what.

Practice! Getting outside yourself and looking at winter weeds or spider webs or cloud patterns helps you to know your subject matter and helps you to know where to look for interesting things. It's good to explore the schoolyard ahead of time to prepare for the outside activities. You want the children to discover things for themselves, and so you want to be sure to take them to a place where they are likely to find what they are looking for. Reading the background information for the unit will help you to feel comfortable with the children's questions.





Some General Pointers:

Our workshops are designed to teach by doing rather than by lecture, by engaging children in hands-on activities that lead to an understanding of the subject. Keep introductory remarks very brief and let the puppet show or slide show introduce the main points of the workshop. A few key questions are usually enough to introduce the topic or summarize an activity.

Move quickly from one activity to the next, avoiding “down” time as much as possible. Try to make your instructions clear and easy to follow. Ask teachers ahead of time to assist by assigning children to groups and helping to lead small group activities. It is better to do fewer activities in an unhurried way, than to rush through too many.

A very good strategy is to alternate active hands-on activities with quiet listening activities so that students are never kept sitting for too long. Ending each activity with a short summary helps to review what’s been learned. Try to engage every child in some way.

Be flexible and seize learning opportunities when they present themselves, like watching a butterfly emerge from its chrysalis or a cloud scudding across the sky. End with a good closure activity. Most of all, be light-hearted and enthusiastic. Everyone learns best when they are having fun.

Take Your Class Outside!

Taking the children outside is an important part of the Nature Program. Children have a great deal of curiosity about nature, and it is important for them to form a strong connection with the natural world. Teachers often can’t take children outside to learn because the group is too large for adequate supervision. With two Four Winds volunteers and the classroom teacher to help, there is plenty of supervision, and the outside time in these workshops can be very rewarding. Here are some guidelines for successful outdoor discovery and learning:



From the first workshop, let children know that outside time with you is not recess but part of the lesson. Explain, or have the teacher explain, expectations for their participation.

Set boundaries within which students may explore when you are outdoors. You may want to put out boundary markers before your workshop, point out specific limits like a fence, or set more general boundaries such as within sight of your red bandana.

Explain the activities before you head out. It is often best to divide the class into smaller groups each with an adult leader for outside activities. Exploring with a partner or small group helps children to stay focused. Before the groups set out, plan a time and place to meet and share findings, and a signal (bell, whistle, gong) to call the group back together.

Begin and end activities with a group circle. You can form a circle with “magnetic elbows” or by sitting with legs toward the center to form the spokes of a wheel.

Discuss rules about collecting. We encourage adults to model behavior that shows respect for living things. We feel that it’s fine to pick things up that you find on the ground (leaves, cones), but not to pick living things (leaves on a plant), or at least not to pick something unless there are so many others like it that you can’t count them (eg. Dandelions!). In general, it is best to ask each group to pick just one specimen to bring back and show the other children.

Sometimes it is useful to plan an activity that allows the children to run around and release some pent up energy when you first get outside, before settling down to exploration.

Success in discovery is the key to a good outdoor learning experience. Scout the outdoor area ahead of time for the best places to make discoveries and carry out activities.

Being dressed right (hats, mittens, boots) is important as it is hard to focus if you are cold or wet. Volunteers can ask teachers to send home reminder notes, and some volunteers bring extra clothing along (taking hats home again to wash, of course).

Play, Laugh, Have a Good Time! Your playfulness and sense of humor will keep the students on their toes. Don't expect everything to be perfect, be open to 'teachable moments', and turn mistakes into learning opportunities.

Puppetry

Puppet shows are an important teaching tool used in nearly every workshop. These simple plays are easy to perform with a bit of preparation ahead of time:

~Tape the script to the back of the stage so you can read it without turning pages.

~Decide with your partner ahead of time who will be handling which puppets and highlight one person's parts.

~Select a voice or character for each puppet ahead of time – it is helpful to note on the script what voice you'll be using for each puppet (high, low, gruff, squeaky, nasal, complaining, cheerful, accents, etc.)

~A speaking puppet should move, usually slightly up and down or side to side, while other puppets should be still. Even stick puppets can appear to walk, run, jump or fly. It's important for puppets to interact with each other by facing each other, moving toward or away from each other, touching. A stick puppet says "no" by turning quickly from side to side, and it says "yes" by moving quickly up and down. Practice in front of a mirror!

~Your puppet stage can be very simple: a box on top of a desk with a sheet thrown over to hide the puppeteers, or a cardboard tri-fold on a table. Some schools have a portable puppet stage, but it's not necessary.

~Make sure all the children can see the show – sitting in a circle or at their desks.

~After the puppet show, review the key points. Holding up each puppet can help children to remember these ideas (eg. "What adaptation does Willy Worm have that helps him to escape from predators?")

~Most of all, go ahead and be silly! The children will listen eagerly. It is surprising how much children retain from what they learn in a puppet show.

"THE END": Don't forget to include this important sign for the end of your show!



Having Fun and Keeping Some Order:

The fun and games of our natural science workshops are exciting for children. Although we want to encourage their enthusiasm, we also need to keep some order in the classroom. Make sure your class understands that you expect them to follow the classroom rules while you are there. Here are some other ideas for making things run smoothly:

- Arrange for the teacher to begin the lesson by reminding the children about appropriate behavior during a Four Winds workshop.
- Pass out nametags at the beginning of your workshop. Being able to address the children by name is respectful to them, and it helps you to get their attention or to call on them when they have a question or volunteer for a job.
- Find out the techniques your teacher uses to get the children's attention (hand-clapping, turning down the lights, etc.).

- Make sure everyone is quiet and listening before you give directions.
- Make your instructions short and clear, and, if possible, demonstrate what you mean. Wait to hand out materials until after you've given the directions.
- Invite a child who is not listening to stand next to you in the circle. Invite a child who just can't sit still to pass out some materials.
- The teacher is responsible for the children; defer to the teacher if any problems arise.

Adjusting for Age

Our workshops are designed for children ranging from 5 to 12 years old. Volunteers teaching kindergarten classes will take a very different approach to a lesson than those teaching in the 5th or 6th grade. In general, after a team has worked with a class for a while, it is easy for them to adapt the workshops to their grade level. Here are some ideas to keep in mind:

For younger children:

- Pick one or two main points to be your focus rather than trying to squeeze in a lot of information and all the possible activities.
- Pick activities that are hands-on and be sure to alternate sitting and moving activities.
- Choose fewer activities: puppet show and two outdoor activities may be plenty.
- Explain activities simply and briefly, or demonstrate them, before you hand out materials.
- You may want to break some activities down into smaller parts.
- Practice new vocabulary with the children at the start.
- Don't linger over slide shows or powerpoint presentations. Instead, keep things moving; plan ahead to transition quickly from one activity to the next.
- Make sure you have eye contact with the children and that you have their attention.
- Take children outside. Try to do this in small groups to keep the children engaged.

For older students:

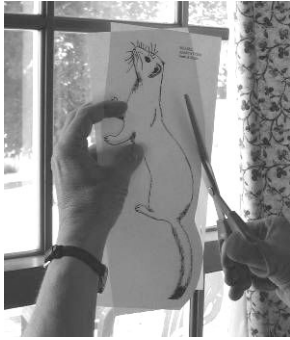
- Plan to have students work with partners for inside and outside activities.
- Have students rotate through stations, working with different leaders and activities at each one.
- Spend more time on discussions, pose questions, encourage students to make connections to other topics that they have been studying.
- Give students opportunities to record their observations, take measurements, draw or write about their observations, analyze their findings.
- Older students may enjoy preparing and presenting puppet shows in younger classes, and this is a good way to give them a chance to be the teachers and to develop a feeling of expertise about their topic.

A Box Of Tricks: Teaching Materials

We will provide you with a set of paper materials for each workshop in addition to some sets, slide shows and equipment. These paper materials include puppet drawings that you can use to make your own puppets, large-size charts, diagrams, and some handouts like worksheets, scavenger hunts, and information pages. Most of these will need to be prepared for use in the lesson.

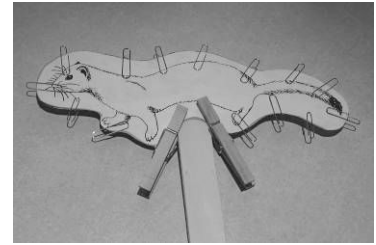
Puppets: You may wish to print out color versions of our puppet stencils on cardstock, from the Materials CD provided to the coordinator. Begin by cutting front and back sides of the puppet apart:





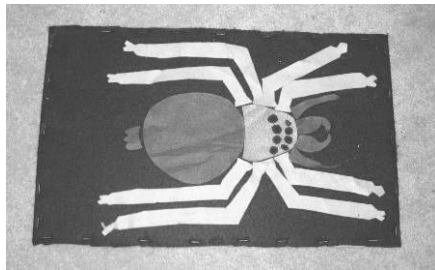
Now, holding the two pieces together, match outlines by holding the paper up to the light, and cut around the figure leaving approximately one quarter inch of margin all around. It is not necessary to cut out legs, arms and antennae, but just the broad outline of the character.

Glue front and back together including a handle such as a wooden tongue-depressor, flat wooden paint stirring stick or a bamboo skewer. Use clothespins or paperclips to hold the front and back together while the glue dries. Afterwards



remove the paperclips and the puppet is ready to use. Store puppets for each workshop in a labeled manila envelope. These puppets will last through many uses.

Puppet Theater: A display tri-fold, either foam core or cardboard, can make a simple, economical stage. Cover the outside with fabric or colored paper or a drawing that indicates the setting in some way. Tape the puppet show script inside. A piece of packing tape at the top of the tri-fold will protect the cardboard and make it easier to tape up and remove the paper scripts without tearing the cardboard. Place it on a table, chair or on the floor and hide behind this screen as you give the show. Another way is simply to drape a piece of fabric over a desk, place the materials box on top, tape the script to the back side of the box, and hide behind the desk while using the box as the stage.



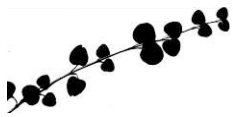
Felt Board: Use tape or hot glue to attach a piece of black felt to a piece of corrugated cardboard that measures approximately 18" X 30". It's best to wrap the felt around the edges of the board. Cut felt pieces for spiders, flower parts, frogs and pollywogs out of colorful felt and display them on the black felt background.

Organizing the Materials Box: It is very helpful if materials are grouped by activity in the materials box. You may do this with plastic zip bags, paper bags, manila envelopes, or boxes, labeling each one clearly with the activity's name. Paper scripts will last longer if protected by a plastic sleeve. On the outside of the Four Winds workshop box or cart, post a list of items provided and a list of items that volunteers are each responsible for providing for their own classroom.

Loaned Materials: We are happy to loan a variety of hard-to-find materials to schools in our programs, and we appreciate your help in preserving them for others to use as well. Please *Handle With Care*, but remember that we do want the children to handle the objects that we provide. We appreciate your supervision when they are handling delicate materials.

No Labeling: please do not mark on the items in kits or sets or alter these things in any way. Federal permits are needed for possession of feathers and nests, so schools will receive sub-permits in the fall that allow volunteers to use these items for their workshops.

Working with Your Classroom Teacher



Volunteers will be working closely with teachers and should plan to meet with their teacher early in the school year. The teacher will want to know the workshop topics that are going to be covered, and you and the teacher will need to set up a schedule of when each workshop will be taught. It is best to get all the dates set at the beginning of the year. They can be changed if necessary, but at least you and the teacher will be alerted to an upcoming workshop on your calendars. Please fill out the schedule below, and give your teacher a copy along with the workshop descriptions that we provide. Topics and dates for the year's workshops:

| MONTH | DATE | TOPIC |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
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When the classroom teacher participates fully in your workshops, it gives children the message that these lessons are an important part of the school day. You may ask the teacher to help with classroom management, leading small groups in activities, and assigning children to groups, as they know what teams work best together. It's also helpful if teachers can send home reminder notes the day before your workshop for children to bring along the appropriate clothing for going outside. Teachers can help with permission slips for special outings to pond, forest, or stream and assist in arranging transportation for these outings. You will also want to talk with the teacher ahead of time to find out:

- if there are any foods that you can't bring into the classroom (food allergies);
- what to do in case of fire drill;
- what special way the teacher has for getting the students' attention;
- any other special issues in your classroom.

We recommend that you postpone your workshop if there is a substitute teacher on the day of your workshop unless the substitute is familiar with this type of program.

Most teachers really appreciate having volunteers lead natural science workshops in their classrooms and are glad that it allows them to include outdoor nature exploration in their curricula. However, there is a great deal that classroom teachers must teach and limited student contact time, and so it is important that our workshops provide meaningful science education and valuable learning opportunities for students. Your good preparation, your engaging attitude, and your creativity make this happen time and time again. Good luck and enjoy!

Thank you for your enthusiasm, your time and your commitment!