

Getting Ready to Lead Youth Learning Experiences in the Outdoors

An Outdoor Mentors' "Kit"— What to take along!

If you're leading a group, having a small backpack with a few items for the group can really help group members feel more comfortable and be ready to explore. Check the following lists, and select the items that might be most useful for YOUR walk:

the state of the state of the

Back pack:

Plenty of zippered pockets, and side pockets for water bottle! Fanny packs work well, too. Just putting on a pack will stimulate curiosity. "What's in your pack?" will be the first question asked!

CI II. II II II

Personal comfort items:

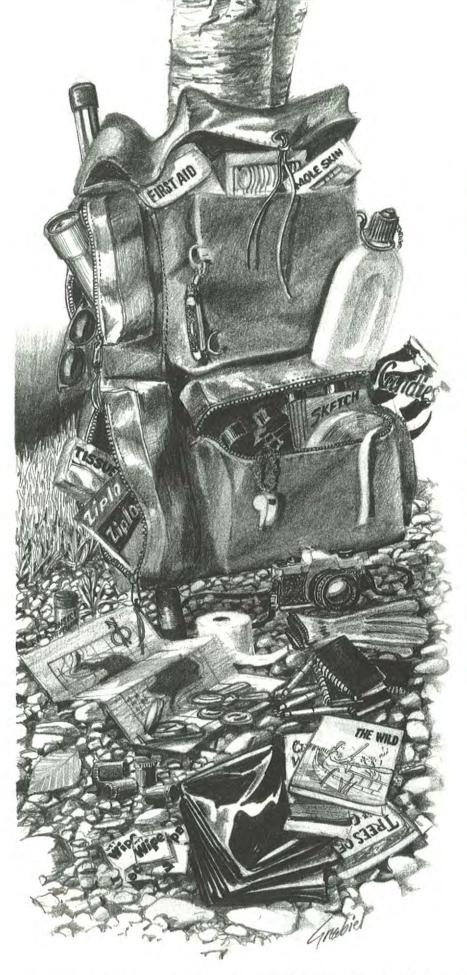
Tissues (perhaps even toilet tissue)

- Antiseptic wipes (if you want to clean up after handling things!)
- □Insect repellent
- □Sunscreen and sunglasses
- Trash bags (which can be used for rain ponchos or "situpons" or for picking up trash!)
- Gloves (even in spring and fall)
- □ Snacks, drinks (including a water bottle—or pop bottle filled with water)
- □ Hard candy (for "prizes" or for thirst guenching!)
- □ Some basic first aid supplies (including whistle for emergency signalling—3 blasts, bandages, antibacterial ointment, matches, needle)
- Be sure that everyone is comfortably dressed for the weather and the terrain—with long pants, socks, poncho, shoes that tie and can get wet or muddy, hat, etc.



HINT:

Have older youth put together their own Dutdoor Learning" pack!



Exploring and Teaching Tools:

Hand lenses/magnifying glasses □ Map of the site Bandanas (or other items for blindfolds) □ Jack knife or small scissors Zipper-type plastic bags Small containers □ Compass □ Spoons **D**Flashlight □ Flagging tape or other material for marking specific sites Uvriting supplies (paper, small notebooks or sketch pads, sharpened pencils) Basic field guides (see pages 60-61) Binoculars (one set, or a quantity) UWhistle, air horn, or wildlife call (crow calls work well to gather your group) ldea notebook or note cards (activity ideas)

"Practitioners in every discipline rely on specialized techniques to get their work done; scientists conduct experiments, archaeologists excavate ancient sites, and...naturalists take walks...walking is a gentle art that will put you in sympathy with a piece of land faster...than any other."

> — David Pepi, Thoreau's Method: A Handbook for Nature Study

List developed by Bud Schulz and Rosemary Thiebaut—4-H Volunteers, and based on *I Can Teach...In the Outdoors* (S. P. Carlson, University of Wisconsin-Extension, Madison, WI, April 1982).

But, I Don't Know Very Much— What if Youth Ask Me Questions?

No one person can know everything about the environment! Even the so-called "experts" are always learning new information, looking up information they have forgotten, and reviewing things they learned in the past. For example, it's very easy to forget bird songs from one year to the next; many active "birders" have to review their bird ID each spring! Even more challenging, is that there are always new discoveries being made, and just when you thought you knew it all, a new species is introduced into an area or a new observation is made!

What's most important is mentoring kids in how to become lifelong learners about their environments. Modelling for kids that you don't always know the "right" answer, helping them to ask their own questions, then helping them to seek out the information from others or from references (such as field guides) will help kids in many ways. Youth will learn more from you if you don't always have "the answer"...they will learn important life skills such as how to find information, make observations, process data, and make informed judgments—all while they enjoy the outdoors.

So, let kids ask questions...ask a variety of questions of kids...and don't worry if you don't know the answers —it's often better if you don't!

How to Ask the Right Questions (vs. Telling or Preaching to Kids)

1. First, create an atmosphere conducive to youth sharing their thoughts, ideas, and honest questions. Tell the group that there will be no personal putdowns. Hold yourself back from always providing an authoritative answer to every question kids ask. Kids need to learn there is uncertainty, especially as they inquire and explore. Don't underestimate the value of remaining silent—wait for 3–5 seconds after you ask a question or a youth asks a question, especially if your goal is to stimulate discussion among kids!

2. Open-ended questions are best! These questions have a wide range of possible answers. Draw on learners' past experiences, but ask them to give opinions and reasons for their answers or to infer or to make judgments about something. Try to get kids listening to and interacting with each other...make sure all are involved. Encourage them to expand on their ideas.

3. Use a variety of questions. Even some closed-ended questions are OK if "sprinkled" in with a variety of other types of questions. These various questions help keep the group together, focused, and motivated to observe and learn! 4.Be ready for anything to come up! Have paper on hand to record questions (for which you don't know the answers or don't know how to address), so that youth can look up information later. Be ready for youth development issues to come up while there is casual conversation. Teens interested in the outdoors and the environment may admit to being called "nature geeks" or "nature nerds" or "science geeks." They may ask you personal questions about your environmental decisions (i.e. did you use disposable diapers for your kids?) or tell you about how their emerging environmental values conflict with those of parents. These are important musings; most of all, serve as a listener. If there are questions you can't handle, be sure to consult with a child development specialist (such as your local 4-H agent or a teacher). And, enjoy the freedom of ideas and expression that come with serving as a mentor with youth in the out-of-doors.

"There are three central values in life the experiential, or that which happens to us; the creative, or that which we bring into existence; and the attitudinal, or our response to difficult circumstances. ...what matters most is how we respond to what we experience in life."

-S. R. Covey

Some Ideas...Questions to Ask

Managerial questions: to keep the group going

- "Does everyone have their coats on?"
- "Can you hear me in the back of the group?"
- "Who hasn't seen/handled/ touched/smelled this yet?"

Rhetorical questions: to reinforce or emphasize a point; usually an answer is not expected

"The white pine has 5 needles in each group, right?"

Question to stimulate recall or memory

"If water is acidic, what is its pH?"

Questions to encourage convergent thinking (encouraging everyone to reach one answer); (may include questions which encourage learners to classify items, or to identify similarities and differences among items)

- "What species of bird made that call?"
- "What do you see at this site?"
- "How many types of conifers do you see at this site?"

Ask questions such as who, what, when, where, and name?

Try to avoid yes/no or narrow questions

Not so good: "Is this a white pine or a red pine?" Better: "What pine do you think this is?" Not so good: "Is this a white pine?"

Better:

"How would you tell if this is a white or red pine?"

Questions to encourage divergent thinking

"What species of tree might this be?"

Questions to encourage evaluative thinking

"Should we pick this wildflower? Why or why not?" Questions to discuss, interpret, explain, evaluate, compare, or to ask "if, or what if?"

Use at beginning of an experience to help stimulate interest: "Do you have ideas on what we might see?"

Use questions at the end of experiences to help youth consider things to investigate or related areas to explore

- "What do you think this area looks like in the winter?" "Should we come back?"
- "How would you explain what we saw?"
- "How many explanations do you have for this fallen log?"

"Every child, and every grown person, too, is interested in nature study...Pupils first need the inspiration of a teacher...

The teacher never needs to apologize for nature. He is teaching because he is an older and more experienced pupil than his pupil is...The teacher must feel the living interest in natural objects...If the enthusiasm is not catching, better let such teaching alone."

—Liberty Hyde Bailey, Lessons With Plants (1898)

(Adapted from: Blosser, P. E. 1975. Ask the right questions. National Science Teachers Assoc., Washington, DC.)

-



Mini-activities will help you get your group ready for more in-depth learning about the out-of-doors. The following activities can be done as a warm-up to a longer walk, or may be expanded to a full activity! Some of these miniactivities teach important skills (such as how to walk quietly together in a group). Others are sensory warm-ups—showing youth how to be observant (with many senses) as they walk and explore. Yet others serve as "ice-breaker" activities to help your youth to begin working together as a group.

> lf outside at dusk or at night, remember to bring flashlights! (You don't have to use them!)

HINT:

HINT: Use cold, winter or rainy weeks to help prepare kids for an upcoming Discovery Walk!

Walking Softly...

Line up your youth shoulder-to-shoulder facing you (and approximately 30-50 feet from you). Demonstrate how to walk quietly through dry noisy leaves or rustling grasses; show them how not to scuff their feet, and how to walk slowly and quietly. Describe the foot motion used to "walk softly" as being like the steps of a Great Blue Heron—which carefully lifts its feet, oneby-one, then places them softly back into the water and mud with hardly a ripple! Exaggerate your demonstration. Next, play a simple game with the group. Tell the group that their job is to see who can walk toward you and reach you first, without you hearing any noise. Turn your back to the group. At the slightest sound, turn quickly and point in the direction of that sound. Tell the whole group to start over, and remind them of their task—that the whole group must be quiet in order for one or more of them to reach you! Play several times, until the whole group can reach you without you hearing a sound!

Walk-In-A-Bag

What do you do if it is raining, sleeting, or snowing so hard that it is difficult to lead a walk? Bring the walk indoors, of course! Select 5–10 items with varied texture or to represent certain themes. Some examples might include: interesting rocks, bones, feathers, branches, leaves, etc. Place each item in its own grocery bag, and staple the bag shut so that there is only enough space to reach one hand into the bag to feel the item. Along each bag, place a large piece of paper, with the following 3 sentences written:

"It feels...."

"It could be"

"I wonder..."

Place a pen or pencil with each bag. Let the youth walk the walk-in-a-bag "trail," exploring the objects in each bag, and writing their reactions onto the large paper. When all are done taking the indoor walk, have a youth read the reactions written on the paper, and discuss the reactions. Finally, reveal what was in each bag, and discuss the items.

Blindfold Trail (or "Trust Walk")

Prior to conducting a trust walk, scout a site, and string a rope along a path. Have the youth work in pairs—one person with a blindfold on, and the other with no blindfold. Tell them that during the activity, they should remain quiet, listening to the sounds around them and the gentle, guiding voice of their partners. Bring each pair to the start of the walk (rope). Have them travel the length of the rope, with the help of their guides. Encourage them to move slowly, feeling the textures of items they come into contact with, and sensing their environments (temperature, light intensity, smells, etc.). When everyone is done (and after each youth has served as guide and walker), discuss what they felt, heard or visualized in their minds. Ask: were there any surprises? You might have them re-trace their steps, to see what they had experienced while blindfolded.



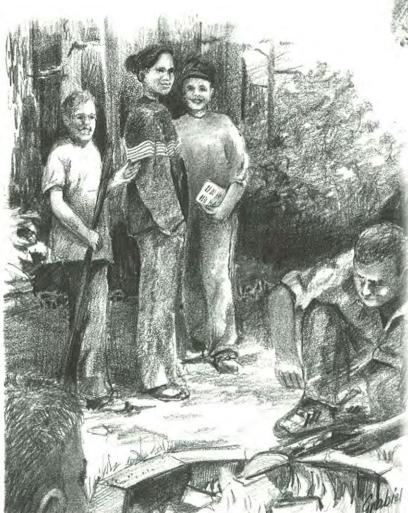
Bingo Hike

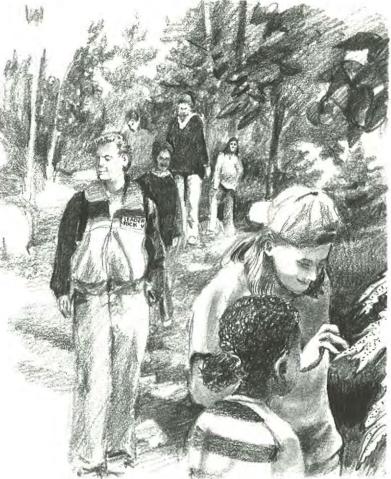
The Bingo Hike is a method for an organized discovery hike. A game board can be created by the youth while they are participating in a hike or prepared by teens and adult leaders prior to the walk. The game board includes pictures and one or two word clues of plants, wildlife, or other interesting discoveries that could be found during the outdoor walk. To design the game board, walk the area and choose 24 ideas. For example: animal home, decomposing leaf, insect activity, see a bird, bird nest or feather, mammal, amphibian, wildflower, tree seed, specific species of trees, animal scat or animal track. Find or draw pictures of each idea, and make the pictures approximately 2 inches square. Add the word clues. Arrange the pictures 5 down and 5 across (leaving the center space a "free space")

under a five letter heading. Suggestions for headings include "BINGO," "PLANT," "TREES," "FIELD," "WOODS," or "WATER." Make multiple copies of the game board, but be sure to arrange the pictures differently for each board. If you make your picture ideas general enough, the game could be used at many outdoor walk locations. The game board could also be displayed as a fair project! Now you're ready to lead the hike ... Have youth work either individually or in pairs, looking for the objects on the game board. First team to place stickers or markings in a complete horizontal or vertical line—WINS! (NOTE: an easier variation of this hike for younger children would be to create the game board in a Tic-Tac-Toe pattern—3 squares across and 3 squares tall.)

Follow-the-Leader

Follow the Leader is a method for a spontaneous discovery hike. After selecting a site for the walk and preparing the group for a comfortable outdoor experience, introduce the activity as an opportunity for everyone to be the leader during the hike. The leader walks in front of the group and has the responsibility to find evidence of animal activity (animal scat, feather, animal home, bird nest, animal track), or an interesting plant (fungi, tree, wildflower, unusually shaped plant), or anything they find fascinating, and show the group while giving a brief explanation of what they observe and why it's interesting. The explanation could be factual (if they know what they are seeing) or creative. The group could follow up the activity by using field guides or reference books to look up factual information about their discoveries.

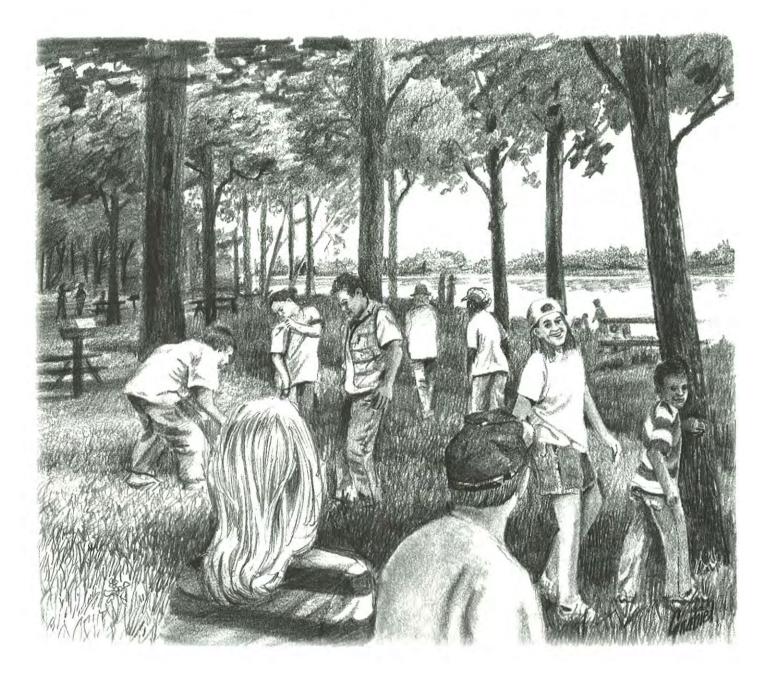




Common Ties

Divide the group into smaller groups of 2s, 3s, etc., depending on the size of your group. Give each group member a piece of paper and something with which to write. Have them divide their paper into two halves; in one half, write "Can See," and in the other half write "Can't See." Have each group make a list of all the things that are common among ALL their group members. Examples of things they can see are hair color, eye color, etc. Examples of things that can't be seen are: speaking the same language, family size, like to go fishing, etc. Describe how this activity helps group members get to know each other and start building important observation skills that might be useful outdoors! As a variation, once you know the commonalities of small groups, you can use this information when you form small groups in the future!

(Based on Quicksilver by Karl Rohnke & Steve Butler, Project Adventure, Hamilton, MA, http://www.pa.org)



Scavenger Hunts

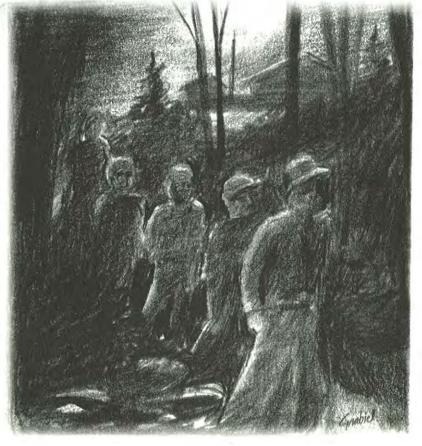
Before leading a scavenger hunt, scout your learning area. Look for items that are common, and those that are rare. Decide on boundaries for this activity. Decide on a theme for the scavenger hunt (e.g., colors), or on specific items to be observed or collected. For older teens, you might identify items that could be "collected" to represent important ecological principles (e.g., ask them to find evidence of parisitism). Be sure to decide your "rules" for what is to be collected (common items) vs. what is to be left alone and flagged. Write out the scavenger hunt list (you don't need many items for a fun activity). Divide your youth into teams, give the group your "rules" and the list, and start them on their way. When they return, have the teams describe their "finds" to the rest of the group, and defend their "answers." Compare and contrast the findings. Be sure to recognize all who participated enthusiastically in the activity!

Night Hikes and Night Vision

Much happens in the outdoor world while we are asleep! Be sure to think about how you could develop comfort in youth in taking walks during the evenings. Choose safe places (with some lighting) to start developing that comfort. Describe to youth how their eyes work in the dark-that the rod cells in their eyes are most sensitive to light. Before starting a walk, have the group stand for awhile looking away from the light, to let their eyes become accustomed to the darkness. The group members will be amazed at how they can see shadows, outlines, and silhouettes better after doing this for a few minutes. Lead the walk. If participants will feel more comfortable, have them walk with one hand on the shoulder of the person in front of them, or hold onto a rope that stretches from the leader to the back of the group. For more helpful tips, see the reference: Knowing the Outdoors in the Dark, by Vinson Brown (Collier Books, New York, 1972).

Dawn/Dusk Watch

Many youth have never had the quiet pleasure of watching the sun rise or set. Prior to setting out, tell the group to remain silent until the whole group reconvenes after the "watch." To do this activity, simply walk a pre-planned route, and place youth to sit silently, alone, in areas with a view of a particular area (a meadow or grassy area, a stream, a pond, a wooded spot). (Note: take safety precautions by choosing a safe area, and having several adults to help.) After about an hour, after the sun sets or rises, walk the route, and ask each youth to follow you back to a meeting/discussion spot. Have them discuss what they saw, how they felt, what they would like to explore or learn about next. You might also have them share entries made in a simple field journal while they were on "watch."



Discovery Walk: For Seeing the Land and Watershed



For Seeing the Land and Watershed

Timing

On a warm sunny day, for a positive experience; in early spring or later fall to avoid insects which are only a problem in some regions; in the early morning or an hour before sunset, to see more wildlife. Once you feel "at home" in your place, repeat the walk at night using flashlights, or on a rainy day with ponchos, or after the first snowfall. Compare or contrast your visits; take one walk in the spring and another in the fall.

Duration

50 minutes, or more! Remember to leave plenty of time to accomplish what you want to explore. Don't be rushed; it only takes away from the experience.

Location

Any of these: a city, township, county or state park; school grounds; an urban "river walk"; golf course; a local farm or nature area; cemetery; fair grounds; a small pond, creek edge, or beach front; your neighborhood; your own backyard. Is the area convenient and safe? Is there easy access? Are there pathways for easy walking? If the site is by the water, do you need life jackets? Do you have shelter, if a storm comes up? Do you have permission from private landowners?

OBJECTIVES

After participating, youth will be able to:

- explore, directly, on their own or with a mentor, a place in a particular environment.
- discover—components of the place, new things, new relationships.
- practice new observational skills as they explore and discover community places.
- be able to think reflectively and creatively about their experiences and their observations. Why are certain components there? What patterns exist there? Why do those patterns exist? What do those patterns mean?
- be able to summarize their observations of the environmental features of a particular place.
- comfortably visit a special area more than once, in order to learn more and develop a lasting sense of place—a vested interest in a place and a sense of belonging to that place.
- see environments and learn more about them with the help of a mentor who is willing to learn along with youth, and help youth make their own decisions about what to learn.
- identify interests...decide what features of a site, what topics, or what specific areas are of interest for further in-depth exploration, study, learning, and improvement.

Life Skills

Learning to learn, wise use of resources, critical thinking, selfmotivation, self-esteem, keeping records, observation, constructing meaning, gathering information, self-reflection.

Age/stage

All ages—5–8 year olds through adults!

Subject Areas

Science, English/Language Arts, Social Studies

Correlations

(For more information on the Michigan Curriculum Framework, see Appendix C for contact information for Michigan Department of Education, or http://cdp.mde. state.mi.us)

Science: SCI 1.1, SCI 11.1, SCI 11.2, SCI 111.4, SCI 111.5, SCI 1V.2, SCI V.1, SCI V.2, SCI V.3 English/Language Arts: ELA 3, ELA 7, ELA 9, ELA 10, ELA 11 Social Studies: SOC 1.1, SOC 11.1,

SOC II.2, SOC II.4, SOC V.1,

Background

Some of the best known thinkers and lifelong learners striving to understand their environments developed the fine art of the "walk".....Henry David Thoreau, Rachel Carson, and Aldo Leopold took walks almost daily, recording their observations, their thoughts, and their musings about how things had changed and would change into the future. Anyone who cares about mentoring youth toward better understanding of environments can lead a walk.

What are some good reasons for leading a walk with youth?

- Walking is a simple activity (and inexpensive)!
- Any leader can lead fun, interesting and thoughtful walks (or "nature hikes").
- Walks are easy to do—in any environment—suburban, urban, or rural.
- Taking a walk is a good use of time outdoors with youth.
- Youth can get fresh air, exercise, sunshine, and learn about their environment!
- Taking a walk provides a direct, real, hands-on learning experience (unlike a video or a game)!
- By leading a walk, you can take advantage of "teachable moments" just outside your door, in your neighborhood, or at your educational site!
- Walks can give kids (and adults) time and space to themselves, outdoors—a valuable asset in our busy lives today!

Guiding youth on a walk can provide a prologue to any other learning experience about environments, environmental sciences, or environmental issues. Taking a walk can develop a sensitivity to a specific area or topic (such as wetlands), and help one make direct connections with a topic or area of interest. Once a youth has experienced an environment directly, only then will he or she be an informed action-taker, who carefully and critically studies an area then determines what positive actions might be taken to resolve an issue or improve an environment. Without this direct knowledge, action-taking may be based solely on emotion or a faint idea of what actions are most appropriate for the system and for people!

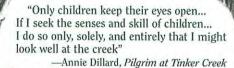
What is a Discovery Walk?

A Discovery Walk is nothing more than a simple hike, where you and your youth group explore an outdoor site using your combined senses—seeing all that's there, looking at the land, smelling its changing scents, feeling the wind in your hair and the sun on your face, while listening for new and different sounds. This walk is like meeting someone for the first time and wanting to get better acquainted, slowly becoming more comfortable and making the land yours.

Why do we take a Discovery Walk first?

You take this Discovery Walk in order to see where your group's interests lie. What areas of study does your new space present? Does it make sense to do a tree project, if there are only three different trees on the site? These are the type of questions that a Discovery Walk will help answer. Maybe the group will decide to do a pheasant habitat project after you hear several calls and see a pheasant flying. Another site—an open field in a neighborhood park, perhaps-may be just covered with summer wildflowers. A small farm pond teaming with life is found on one site, while an old woodlot on another site cries out for an Adopt-a-Woodlot Project. After your discovery walk—now that your group sees a friendlier outdoors and group members share a new-found sense of placedecisions about more advanced projects will be easy for youth (and you) to make.

Who should go on this first walk? Everyone in your youth group including leaders, parents and teen leaders, should go! The young naturalists can be from one age group or a mixed group with teens helping with the younger members. Remember, you know your group best and how many adults you will need for a successful activity. On this first walk, try it without any outside help—just you and your group exploring on your own. Don't worry about not knowing all the answers to questions. Just write them down for further research. After you make some decisions on what you want to do at this site on future walks, you may want to get some resource help. These resource people can be state or federal biologists, foresters or local outdoor educators. Professionals can be a great help when needed, but try to do as much discovering on your own as possible, before you reach out. The "hands on" doing and exploring are your main objectives at this time.



Materials

Flagging tape or bright small marking flags (or other means of marking interesting "finds"—such as bandanas, bright streamers).

Optional: pencils, index cards or simple field journals, hand lenses, field identification books, zipper-type plastic bags or other small containers for looking at things collected temporarily. Also, see pages 18–19, "Mentors' Kit."

Procedure: Getting Ready

Choose an area for your group's walk. Then, scout your place by doing a solo "prewalk" at the same time of day as you plan to do your group walk; look for interesting features, things to wonder about, and signs of change. In short, look for "teachable moments and places."

- What features do you think youth will find interesting? What is happening in your place (is anything happening now and only now—e.g., blooming wildflowers, tree leaf buds opening, leaves falling, wildlife moving, birds singing)? Will the place lend itself to further study? Is it a place that, once youth "know" it, they will want to return to it?
- Will the participants need warm jackets, boots (old shoes), or long pants for going off the trail?
- How much time is needed to slowly walk the site exploring, not just walking? There is a big difference!

- Can you find out some history or stories of the area? You might look for an old map or photos showing the site, or talk to longtime residents of the area.
- Does the place require any special planning for safety? (For example, will human use patterns and traffic patterns determine the best time of day to visit the site? If the site is near water, will youth need life jackets?) How will youth need to dress for the walk? (What outerwear will be needed? Will they need to wear shoes they can get muddy? Will they need a hat, long sleeves, and long pants in order to stay warm or avoid biting insects?) Are there insects, poisonous plants, bee hives or other safety/comfort issues?

HINT: Remember the learning cycle explained earlier in this guide. Kids need and like to: • Do

- Reflect on what they have done, seen
- Apply/Share what they have learned

Be sure to consider your group carefully; youth who have had limited outdoor experiences will find even average mosquito densities or moderate dampness extremely uncomfortable. You may need to revise your choice of sites depending on the general comfort-level and experience of your group! Consider taking another volunteer and one or two youth on your scouting walk, to see if the site is interesting from their perspectives!

In leading a Discovery Walk, there are many "doing" activities which could be included to keep the walk lively for youth. These activities are simply what kids like to do—and provide very basic "hooks" to capture youths' interests! These activities include:

- observing (writing in a journal)
- catching/collecting things
- drawing/sketching
- taking photos
- taking an inventory, listing what's there
- building (e.g., nestboxes, feeders)
- simply exploring or travelling
- getting dirty
- building and "living" in something (e.g., a temporary "fort")
- recreating...canoeing, fishing, etc.

Decide which of these activities you might be able and prepared to do with youth at your site, then scout the site with these activities in mind.

Doing

- Tell your group that you'll be going on a Discovery Walk. (Or use some sort of creative label for the walk that you think might appeal to your youth, such as "Adventure Hike," or "Wetlands Are Wild and Wonderful" Walk!) Also, for older youth, you might read the group a short quote (such as something from Aldo Leopold's Sand County Almanac essay "January Thaw") to set the stage for your walk.
- 2. Tell the group members that you want to introduce them to an outdoor site with all its natural components. You want them to have fun, and in turn, become more comfortable with the outdoors at this new place. By opening a window on the natural world you hope to create interest in doing more in-depth studies of your special place.

Describe any important (but few) group rules you may have (about staying within sight of each other, about site features like steep areas or other types of minimal "dangers"). 3. Tell the group that you will be doing something like a scavenger hunt on your new site. Give each pair of youth a colored flag or other type of nonpermanent visible marking item (such as a bandana, bright streamer, etc.). Instead of having everyone picking up everything they find, tell the pairs that they are to explore their area, then use the marker when they discover something interesting. Besides the environmental reasons for not collecting everything, often the area surrounding where something interesting was found is just as important as the find itself!

Location will usually help you identify the object in question or at least tell the story of what happened at the discovery site. A single feather may be just the beginning of a larger story only a few feet away. Was the pheasant killed by a hawk, or is the feather from a nearby nest? Was the bird killed by a predator (a broken bloody feather), or did a bird just drop the feather? Encourage the youth to look high, and to examine low spots...to look at big features, and to look at the tiniest of features—whatever is of interest!

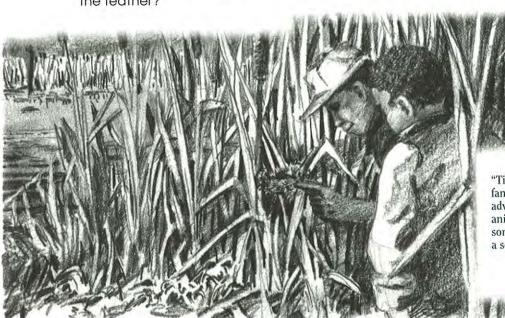
- 4. Give the youth plenty of time to roam (within the area you define, and for younger youth, within view of adults). Remember, there is no fixed way to explore. Your group members must decide how they want to do it. Kids love to discover for themselves. Encourage each pair, using phrases and questions such as "What's out there?" "Let's see what we have here." "Gee-I wonder what that is, too." "You're right, that's very interesting-I didn't notice that before!" It is at this time that you might encourage youth to write a field journal entry or brief notes (see optional step #5, below). Or, your youth could photograph, sketch, or "do" the activities suggested in the Background section of this activity.
- 5. (Optional-Activity alternative format) Instead of having each pair of youth pick their own locations to explore, you could (from your earlier scouting activity) have the group stop at six to eight spots you determine in advance will probably catch their attention and interests. For example, stop the group at a place with wildlife sign (tracks, droppings, feeding evidence), at a dead tree (called a "snag"), among a quiet grove of planted pines, at an area of an old homesite now grown over with shrubs and trees leaving only some small evidence of a foundation and yard plantings, in an open area with a wide panoramic view, at an area that has had some human disturbance over time, etc.

At each spot, ask these 4 very open-ended questions (allowing time for pairs of youth to discuss and possibly write their answers on an index card or in a journal):

What do you see? What could it be? What was it like before now? What might or could it be like in the future?

"Tiny humans begin their journeys in the haven of family...each moves from there into the land, adventuring...By forging connections with plants, animals, and land, by finding ways to experience some relationship to the Earth, individuals can gain a sense of worth."

–Gary Paul Nabhan and Stephen Trimble, The Geography of Childhood



Reflecting: Talking It Over

6. Reflecting on what your group members have seen and applying/sharing their learning are important final steps in a Discovery Walk. Bring everyone back together, and visit each special feature identified as interesting by the youth. Let the pair of youth share what they flagged, and share why they noticed it; let them describe what they see, and what they think the feature could be. Ask others in the group what they notice about someone else's site.

It is at this point that you can gradually introduce terms, concepts or even identification characteristics with which you might be familiar. You can be guaranteed that youth will see things you did not notice on your scouting trip and with which you are not familiar! Don't worry—use the questioning skills outlined earlier in this mentor's guide, consult any field guides you might have, and most importantly, be ready to encourage the youth who is most interested to go further in looking up and learning more about the feature they have discovered!

Some additional tips for doing and reflecting on this experience:

- Keep a lively, interested outlook, no matter the conditions, the weather, or your level of experience with the area.
- Don't be afraid to say "I don't know—what do YOU think?" This helps stimulate youths' curiosity and helps them see you as a mentor willing to learn with them.
- Be sure to leave time for "down time" or "play time." Youth who have spent little time outdoors and experienced youth alike gain pleasure and heighten their curiosity by goofing around in a creek, building forts in the bushes, gathering near a special tree to chat, and making use of environments in their own special ways.
- Let kids lead! From time to time, make sure youth take the lead! Some have never had the opportunity to "be the leader" for a group.
- Know your group! Sometimes, teens and younger youth in one group won't mix. You may need to split up your group by age or by interests. Or, be ready to handle very different types of interests and attention spans while on the walk.

HINT: Remember...

Grabiel

Important Note for Mentors:

Be careful about encouraging youth to collect interesting "treasures" they discover. Many items are great for collectingexamples of items which can easily be collected include: walnut shells left behind by squirrels which have eaten the nuts, pine cones or needles, flowers which are not protected by law, insects and other invertebrates. Kids love to collect things, and having items such as these can truly seem like having "treasures." However, feathers of most birds, parts of birds or animals, and rare or endangered or threatened species are not to be possessed—check with the Michigan Department of Natural **Resources Wildlife Bureau** (http://www.dnr. state.mi.us) on what species of plants and animals are protected. If you wish to do much collecting, you will need to apply for a Scientific Collectors' Permit from MDNR Wildlife Bureau and/or Fisheries Bureau. Finally, be sure to help foster a "take only pictures,

leave only footsteps" ethic over the long run with youth—do let them collect the treasures they can, and DO LET THEM ENJOY the many "keepsakes" our environments have to share, but encourage them to think about the impacts they may leave in a highly used area or with rare features if too much collecting occurs.

Applying: Using What We Know and Sharing What We Learned

Apply what was learned by having the youth decide what they want to learn about next! And consider sharing what was learned through making a group display (for a county fair, science fair, or Earth Day event)!

Adaptation

At a wet, wooded site walks could focus on noticing all of the many types of wetlands in just a short distance. For example, walkers could explore boas, lakeshore swamps, small swamps, and other sites, all close together! Or the group could visit a variety of wildlife habitats, such as a meadow, wetlands, hilltops, older forests, and a younger aspen cutting! At a more urban or suburban site, there are just as many opportunities (if not more) to discover many things with your group within a short distance. At a schoolground, look for asphalt, street trees (Tree of Heaven, etc.), weed patches, plants (such as chicory, knotweed growing through sidewalk, moss, smartweed, algae, vines, plantings, etc.), animals or animal signs (look during day, dusk, or night), and water (watch the

MY 4-H SAFARI BACKYARD TREES LAM ILA Maple Pine Spruce · Raccoov GUCOD MULDEVA BIRDS Parrows INSECTS FIVE hickades inch WILD FLOWERS phids Pardelión Amphibians Fern ovewt GRANITE

rain, watch where water accumulates after the rain, trace water from rooftops and parking lots to where it goes, watch puddles, learn about where drinking water comes from and wastewater goes). Take your walks early in the school year, throughout the year, or visit one space at several seasons. Don't forget the wide range of places you have to explore: schoolgrounds, rooftops, church lots and grounds, vacants lots, parks, community centers, doing street surveys, or visiting building structures (throughout the city scape), or even walking in cemeteries.

Extensions/Additional Resources

Take several varieties of this Discovery Walk, by:

- looking at all things in general
- discovering things in a general category (e.g., wildflowers, or wetlands, or types of wildlife habitats)
- exploring your place to brainstorm opportunities for study or management of it.

Ideas for this activity and for further study include the following:

- Dudderar, Glenn R., Denise Wecker-Seipke, Dale K. Elshoff, Shari L. Dann and C. A. Boucher. 1996. School Ground Habitat for People and Wildlife. MSU Extension Bulletin E-2583, E. Lansing, MI.
- Knapp, Clifford E. 1995. Lasting Lessons: A Teacher's Guide to Reflecting on Experience. ERIC Clearinghouse on Rural Education and Small Schools, Charleston, WV.
- Knapp, Clifford E. 1996. Just Beyond the Classroom: Community Adventures for Interdisciplinary Learning. ERIC Clearinghouse on Rural Education and Small Schools, Charleston, WV.
- Project Learning Tree activities, including: "School Yard Safari" and "Peppermint Beetle Walk." See also the Leopold Education Project for many more activities, especially for teens and older youth. Contact: Michigan Project Learning Tree and Leopold Education Program Coordinator at: MUCC, 2101 Wood St., Lansing, MI 48909. (http://www.mucc.org)
- Pepi, David. 1985. Thoreau's Method: A Handbook for Nature Study. Prentice-Hall, Inc., Englewood Cliffs, NJ.
- Russell, Helen Ross. 1973. A Teacher's Guide: Ten-Minute Field Trips, Using the School Grounds for Environmental Studies, J. G. Ferguson Publishing Company, Chicago, IL.
- Shaffer, Carolyn and Erica Fielder. 1987. City Safaris: A Sierra Club Explorer's Guide to Urban Adventures for Grownups and Kids. Sierra Club Books, San Francisco, CA.
- VINE: Volunteer-Led Investigations in Neighborhood Ecology. For more Information, contact North American Association for Environmental Education, 410 Tarvin Rd., Rock Spring, GA 30739 (http://www.naaee.org).

Community Service

From the start, consider having your youth do this activity at a site where you intend to have youth plan and conduct some sort of community service activity later. For example, this activity could lead into such community service projects as: Adopt-A-Park, Adopt-A-Forest, Adopt-A-Neighborhood, or Adopt-A-Roadside projects.

Exhibits/Sharing

Have youth share: field journals, sketch maps, sketches, photos, or small collections of items seen while on their explorations. Prepare a display of how the area changes throughout the day, or over several seasons.

Career Opportunities

Naturalist, science teacher, outdoor writer, outdoor guide, natural resource manager

Source

Written by Bud Schulz, Chairperson, Michigan 4-H Natural Resources/Environmental Education Program Committee, and 4-H Volunteer, Clinton County, Michigan. Additional ideas from other volunteers, and from the publication: *I Can Teach...In the Outdoors* (S. P. Carlson, University of Wisconsin - Extension, Madison, WI, April 1982.)