

A guided exploration

JOURNEY TO THE HEART OF NATURE



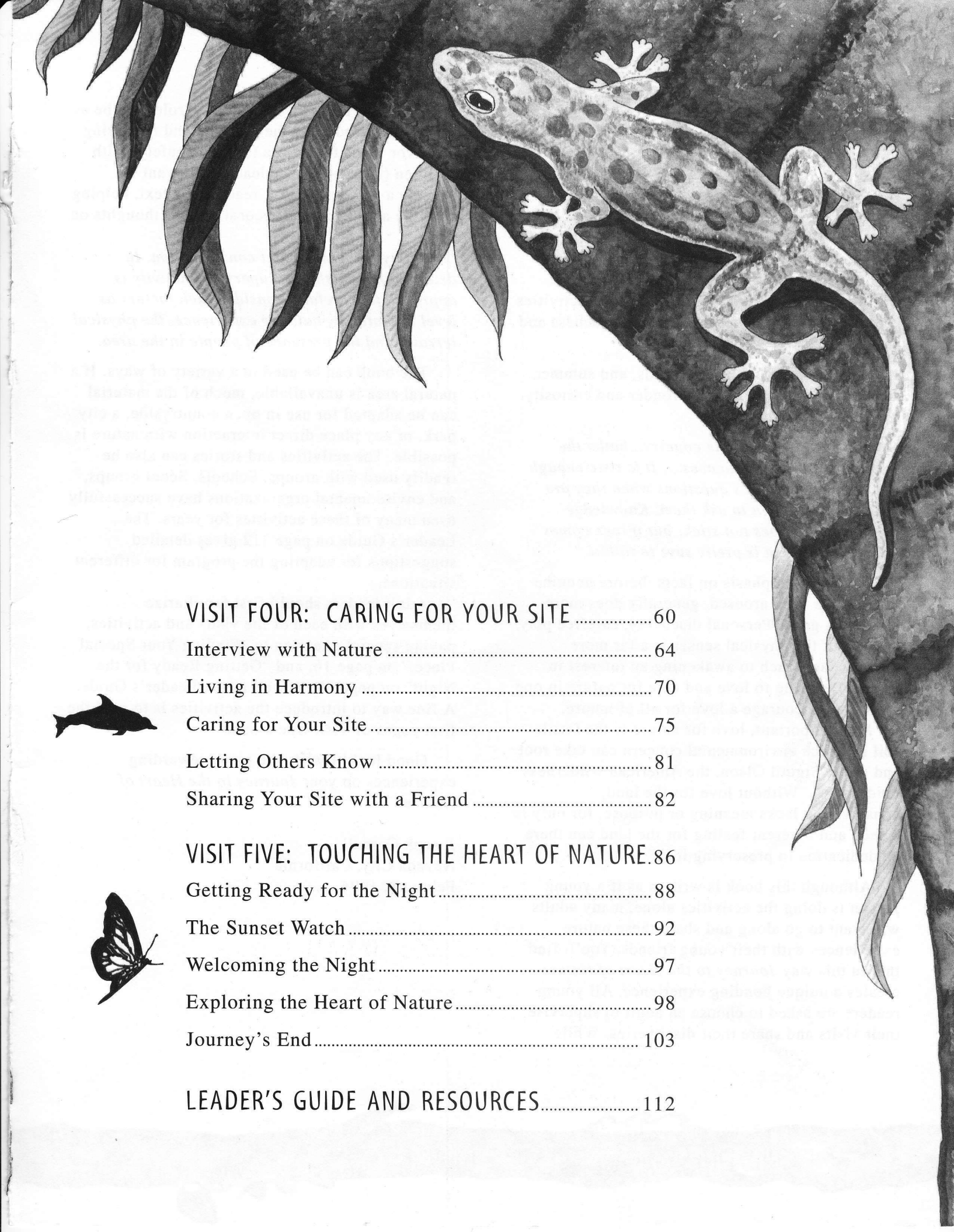
especially
for
Young
Adults

by **JOSEPH CORNELL**
Author of *Sharing Nature with Children*
and **MICHAEL DERANJA**

CONTENTS

FOREWORD	5
GUIDELINES FOR A SUCCESSFUL JOURNEY.....	8
VISIT ONE: CHOOSING AND EXPLORING YOUR AREA...	10
Finding Your Special Place.....	16
First Impressions	19
Mapping the Boundaries of Your Site.....	20
The Adventure Hunt.....	22
Exploring the Neighborhoods.....	24
Awakening Curiosity	26
VISIT TWO: ONE BIG FAMILY	28
Creating a Sound Map.....	31
Reading the Forest	32
Who Lives Here?	33
Attracting Animals.....	35
All Our Relations	38
Hello There...I Know You.....	40
The Web of Life at Your Site	42
Clues to the Past	44
VISIT THREE: GETTING CLOSE TO NATURE.....	46
The Listening Game	50
With Beauty Before Me.....	52
Choosing an Earth Name	55
Learning from Nature	56
The Poetry of Your Site	58





VISIT FOUR: CARING FOR YOUR SITE 60

Interview with Nature 64

Living in Harmony 70

Caring for Your Site 75

Letting Others Know 81

Sharing Your Site with a Friend 82

VISIT FIVE: TOUCHING THE HEART OF NATURE. 86

Getting Ready for the Night 88

The Sunset Watch 92

Welcoming the Night 97

Exploring the Heart of Nature 98

Journey's End 103

LEADER'S GUIDE AND RESOURCES 112





Guidelines

FOR A SUCCESSFUL
JOURNEY



Journey to the Heart of Nature was written as a guided exploration for young adults (ages 12-17); but older children (ages 9-11), and adults as well, will enjoy its stories and activities. In fact, many adults will want to use this book for their own personal inspiration.

The *Journey to the Heart of Nature* reader chooses and explores a special place in nature. During a series of five visits, stories and activities help the reader discover the area's uniqueness and beauty.

Direct contact with trees, birds, and summer meadows awakens a natural wonder and curiosity. As John Burroughs wrote:

"Turn them loose in the country...bathe the spirit in natural influences.... It is time enough to answer children's questions when they are interested enough to ask them. Knowledge without love does not stick; but if love comes first, knowledge is pretty sure to follow."

Too much emphasis on facts, before genuine interest has been aroused, generally does more harm than good. Personal discovery, carefree play, and use of the physical senses is a far more effective approach to awakening an interest in nature. Learning to love and care for nature in one place will encourage a love for all of nature.

Most important, love for nature is the fertile soil in which environmental concern can take root and grow. Sigurd Olson, the American wilderness guide, said, "Without love for the land, conservation lacks meaning or purpose, for only in a deep and inherent feeling for the land can there be dedication to preserving it...."

Although this book is written as if a young person is doing the activities alone, many adults will want to go along and share these nature experiences with their young friends. You'll find that in this way *Journey to the Heart of Nature* creates a unique bonding experience. All young readers are asked to choose an adult to supervise their visits and share their discoveries. While

working with teenagers, the adult's role may be as simple as introducing the program and reviewing plans for visits to the site to ensure safety. With children (ages 9-11), the leader will want to become a co-participator, reading the text, helping with the activities, and recording their thoughts on paper.

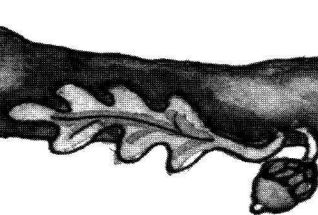
Safety is an important consideration. In determining whether unsupervised activity is appropriate, carefully consider such factors as level of maturity, outdoor experience, the physical terrain, and the presence of people in the area.

The book can be used in a variety of ways. If a natural area is unavailable, much of the material can be adapted for use in open countryside, a city park, or any place direct interaction with nature is possible. The activities and stories can also be readily used with groups. Schools, Scout groups, and environmental organizations have successfully used many of these activities for years. The Leader's Guide on page 112 gives detailed suggestions for adapting the program for different situations.

Adult leaders should first familiarize themselves with each of the visits and activities, paying special attention to "Finding Your Special Place," on page 16, and "Getting Ready for the Night" on page 88, as well as the Leader's Guide. A fine way to introduce the activities is to read the first pages of Visit One aloud.

Good luck! I wish you many rewarding experiences on your *Journey to the Heart of Nature*.

Joseph Cornell
Nevada City, California
February, 1994



Leader's Guide

The Role of the Leader

The adult mentor plays a key role in *Journey to the Heart of Nature*. Rachel Carson said, "If a child is to keep alive his inborn sense of wonder...he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in."

Your enthusiasm for nature will be your greatest asset. Therefore, don't be overly concerned if you lack training in the natural sciences. No one, no matter what his or her expertise, can answer *all* the questions generated by curious children. Your excitement and desire to help young people find their own answers is what will make *Journey to the Heart of Nature* a success.

Although each young person chooses his or her own specific site, you should try to select the best general area you can for the visits. A place with interesting terrain and a variety of habitats will help to awaken a sense of adventure and curiosity. Taking the time to locate such an area is well worth the extra effort.

The stories in the book create a keen interest in the activities. To keep the stories fresh and motivational, it's best to save them until the young person is about to go to the special place. As the leader, however, you'll want to read through the book beforehand to become familiar with the visits and to introduce the program effectively.

Since there are many activities to choose from, you should feel free to emphasize those activities you feel will work best for you, and stay with them as long as interest is high. The overall enthusiasm for nature is much more important than what can be learned from any one activity.

Safety Concerns

As the responsible adult, you'll need to decide whether a young person can be left alone without supervision. Level of maturity, outdoor experience, and the presence of other people in the area should be considered, as well as any potential physical dangers. Avoid, for example, cliffs and avalanche

zones, and areas where quicksand or flash floods might occur. You should also determine if dangerous animals are a threat. If you are unfamiliar with the region, contact someone who can tell you the important information you should know.

Before a young person visits the site for the first time, inform him or her of any poisonous plants or animals and other possible hazards such as lightning or impure water. On Visit Five, you may want to camp with or near the young person, or plan late evening and early morning visits if an overnight stay isn't advisable.

Planning for Special Uses

Regular Program

Journey to the Heart of Nature works equally well in camp settings or on field trips. At a camp, for example, you could plan a visit each day, while with a youth group or class, field trips could be scheduled once a week for five weeks. Each visit has a particular theme.

Visit One: The reader chooses and begins to explore a special place in nature.

Visit Two: Suggests ways to become familiar with animals and plants that live in the area.

Visit Three: Encourages receptivity to nature.

Visit Four: Suggests ways to preserve and care for the site and to share its special features with a friend.

Visit Five: Encourages personal reflection during an evening/morning or overnight visit to the site.

Visits One, Two, and Three take about an hour and a half of field time. The time required for Visit Four depends on the conservation project you select plus about 30 minutes for the *Sharing with a Friend* section. If the young person will not be staying overnight on Visit Five, allow two and a half hours for the evening and one hour for the morning.

Because of the need for writing, try to avoid wet weather visits. Reasonably comfortable

weather also makes for longer, more enjoyable periods of quiet observation. In some areas you may want to time your visits to avoid natural inconveniences, such as afternoon thunderstorms or mosquitoes which are usually active at dawn and dusk.

Feel free to combine, extract, and rearrange the activities from the various visits to fit your needs. The following sections give suggestions for weekends and single visits.

Weekend Use

If you want to complete the program in a weekend, you could follow a schedule like this:

Friday late afternoon—Visit One

Friday night—group meeting

Saturday morning—activities from Visits Two & Three

Saturday afternoon—conservation project from Visit Four

Saturday evening/Sunday early morning—Visit Five

Sunday mid-morning—*Sharing Your Site with a Friend*, Visit Four

Single Visit Experience

If you are visiting a natural area only once, here are some suggested activities you might choose from:

<i>Finding Your Special Place</i>	Page 16
<i>First Impressions</i>	19
<i>Mapping the Boundaries of Your Site</i>	20
<i>The Adventure Hunt</i>	22
<i>Exploring the Neighborhoods</i>	24
<i>Awakening Curiosity</i>	26
<i>Creating a Sound Map</i>	31
<i>Who Lives Here?</i>	33
<i>All Our Relations</i>	38
<i>Clues to the Past</i>	44
<i>The Poetry of Your Site</i>	58
<i>Interview with Nature</i>	64
<i>Caring for Your Site</i>	75
<i>Sharing Your Site with a Friend</i>	82

Awakening Enthusiasm

An excellent way to encourage enthusiasm for *Journey to the Heart of Nature* is a group gathering. You might want to introduce the program at a first meeting, then get together after each visit to share experiences and play nature activities with the group. A breakfast get-together after the overnight visit can be especially meaningful.

If the group members visit their individual areas at the same time, you may need to plan extra activities or stories for those who finish early. (For additional ideas and games, see *Sharing Nature with Children* and *Sharing the Joy of Nature*, available from Dawn Publications.)

Try to think of creative ways to introduce the activities. For example, before the group members go out to find their special spots, you can show them a map of the area that is labeled with exciting names such as Giant of the Woods, Inland Sea, Unexplored Territory, Troll's Bathtub, and Cathedral Forest.

Another effective way to encourage exploration and observation is to take photographs of interesting features and views in the area and ask the group to try to find the site of each picture.

Introductory Field Experience

Another good way to create interest is to lead the group through some of the activities before you introduce the complete program. After they've had fun doing the activities together, young people are much more likely to apply themselves enthusiastically on their own.

The following recommended activities take a little over an hour to play. Keep the group in the same general area, then gather them after each activity for discussion and directions.



<i>Activity</i>	<i>Page</i>	<i>Time Required*</i>
<i>The Adventure Hunt</i>	(22)	15 minutes
<i>Meet a Tree</i>	(85)	15 minutes
<i>The Poetry of Your Site</i>	(58)	20 minutes
<i>Uplifting Story</i>	(select)	5 minutes

*Times do not include sharing time.

When using the *Adventure Hunt* with a group, send the players out individually, then call everyone back as soon as some have finished, and divide them into groups of four so they can share their discoveries. (Small groups encourage more involvement than a single large group.) After five minutes or so of sharing, have everyone point in the direction of their best view. There's always much laughter when the children extend their arms pointing in all directions.

To play *Meet a Tree* with a large group, you'll need to find a wooded area with trees of different species, sizes and shapes. (Check also to make sure the forest floor is relatively free of undergrowth and that there are no poisonous plants or other hazards.)

Children who aren't old enough to guide a partner safely can pair up with an adult or older child. When introducing *Meet a Tree*, it's especially important to tell young guides to be gentle and careful while leading their blindfolded companion.

For *The Poetry of Your Site* activity, you may want to make a group Vertical Poem first, before sending everyone out to do their own. Afterwards, meet all-together or in small groups.

My Special Spot: A Group Activity

My Special Spot gives everyone a chance to be alone in nature while in a group. This activity is ideal in situations where the children are too young to be left unsupervised; when there's not enough time for a regular visit; or as a quick introduction. Before using this activity, it's best to play a few active, group-oriented nature activities like the ones mentioned in *Sharing Nature with Children* and *Sharing the Joy of Nature*.

Give each player a pencil and a *My Special Spot* activity sheet. Tell them that they must each find their own special place in nature. Once they've found their spots, the players will choose from the activities from the list that most interest them. (If you would like more information on the Vertical Poem, (#6 next page), refer to *The Poetry of Your Site* activity on page 58. For *Bird Calling*, (#3 next page), you'll want to substitute a different bird calling sound if you are somewhere other than North America or Europe.) Designate the area where everyone is to search for a spot, and make arrangements for everyone to return at the same time (use a watch or a loud sound).

Once everyone has finished, have each person make an invitation from an index card. (See sample drawing below.) Ask half of the group to put their cards into a hat, then have those with cards left over draw a card out of the hat. Once they've picked a card, they should pair up with the person whose card they've drawn. Then, for example, if Mary picks Barbara's card, Mary keeps Barbara's card and gives her own to Barbara. Then Barbara and Mary go off to share their special spots with each other. Have the pairs share the activities they've done, as well as anything else they've discovered about their special spots.

Write your name and your special spot's name in the invitation card below:

You are Invited to Explore:

Your Guide is:

1) *Think of a name* for your special spot:

2) *The Best View*: Find your best view and make a sketch of it. Later, you'll share the sketch with a friend. (See if he or she can find it.)

3) *Bird Calling*: If you hear small birds, stand or sit very still near some bushes or trees, and repeat the “*pssh*” sound several times in sets of four: “*pssh...pssh...pssh...pssh.*” Repeat the four-part call three to five times, then pause to listen. Continue “*psshing*” and listening. The birds will respond in a few minutes or not at all. Write down what happened, and describe the birds you saw.

5) *Letting Others Know:* Which part of your spot is most special to you? In the space below, describe what it is. Later, you'll give your description to a friend, and ask him or her to find it.

4) **Sounds:** Find the best place to listen for nature sounds. Then, see if you can hear at least four different sounds in less than a minute. (If the area is quiet, you can take longer.) See if you can figure out what is making the sounds. Write down the sounds:

1) _____

2) _____

3) _____

4) _____

*) _____

*) _____

6) *Vertical Poem*: Choose a word that captures the feeling of the place you've chosen. Write each letter of the word in the column at the left. Then use each letter to begin a line of your poem.

[illegible]



The Fifth Visit: Special Considerations

Sunset Watch

After setting up camp and going for a walk around the site, try to arrive at your watch spot about 15 minutes before actual sundown for this activity. Because you'll be sitting for at least another 30 minutes after sundown, a long wait beforehand might make a young person restless. You may want to bring a star chart along to identify the constellations.

Campfires

I didn't recommend making a campfire in Visit Five for the following reasons: the purpose of Visit Five is to encourage experiencing the world at night, and a campfire's light reduces one's ability to see; it's risky for inexperienced campers to build fires unsupervised; and a campfire can negatively impact the environment in the area.

In some places and at certain times of the year, a campfire may be appropriate. (Young campers in particular will find a fire comforting and companionable.) If you decide that your campers are sufficiently skilled in safe fire-building practices, you might compromise by suggesting that they have a *small* campfire after completing the star-viewing activities. (It's best to use an existing fire ring, if one is available.)

Before giving the group permission to build a fire, you will of course need to find out if it's legal to build fires, and if there are regulations for where and how fires should be built. Make sure everyone who wants to build a fire has had training on how to build fires safely. Good sources of information on building fires are the *Boy Scouts of America Handbook* and *Fieldbook*. (See page 118 for some guidelines from these books.) You'll also want to contact the local forestry or park agency for information.

In a large group of solo campers, you should consider prohibiting campfires in order to reduce the impact on the area.

Human Waste

Whether a young person stays overnight or not, every visitor needs to be taught how to properly dispose of human waste, preferably before Visit One. See page 118 for more information.

Follow-up after the Journey

Ongoing Care For The Site

After completing the visits, many young people will have established a real bond with their special place. If they live nearby, they can continue to develop this relationship with the help of other activities. Books such as *The Earth Manual*, which was referred to in Visit Four, suggest a variety of ways to become involved in the long-term care of the site.

New Journeys

During the five visits, a young person may express special interest in a particular aspect of nature, such as rocks or trees. This is a golden opportunity to introduce him or her to a resource person who can further encourage this interest. Many individuals and nature organizations will be eager to share their knowledge.

The Birds of the Air

Groups enjoy singing *The Birds of the Air* and using its Indian sign language-like movements. These hand and arm motions express in a beautiful way the meaning of the words. Using these movements while singing the lines makes a wonderful closing activity.

The birds of the air are my brothers,

Stretch both arms out to the side, turning the palms down. Gracefully wave the arms as if they were bird wings.

All flowers my sisters,

Bring the palms together in front of you, then spread your fingers apart like the opening of a flower.

The trees are my friends.

Join the palms together above your head and sway your body like the trunk of a tree.

All living creatures,

Bring your hands down to your heart, then sweep both arms out to the front and to the sides in welcome to all creatures.

Mountains,

Bring your fingertips together at chin level to form a mountain peak.

And streams,

Keeping your left hand at the chin, sweep your right arm out to the side fluttering the fingers like rippling water.

I take unto my care.

Cup one hand on top of the other, palms up at heart level, holding all nature in your care.

For this green earth is our Mother,

Sweep your hands up and out from the heart, reaching out to include the whole earth.

Hidden in the sky is the Spirit above.

Look upward, extending your arms toward the sky.

I share one Life with all who are here;

Cross your hands at the heart.

To everyone I give my love,

Keeping the right hand at your heart, sweep the left hand out to the side with the palm up.

To everyone I give my love.

Keeping the left hand out to the side, sweep the right hand out to the other side, again with palm up.

Sheet music for *The Birds of the Air* can be found in my book *Sharing the Joy of Nature*. The song can be heard on the nature games audio cassette, *A Day in the Forest*. The arm and hand movements are demonstrated on the *Sharing the Joy of Nature Video*. All are available from Dawn Publications.

Resources for the Leader

The books in the following list are all excellent resources for stories, outdoor living skills, and natural history. The first three books are of special interest to young people, while the remaining books are directed more to the group leader. When a title isn't self-explanatory, a short description is included. Ask a local naturalist, librarian, or bookstore clerk to recommend field guides specific to your area.

My Side of the Mountain, by Jean George. Copyright 1959. Scholastic Book Services, New York, New York. A boy's year-long adventure living alone in the wilderness. (Fiction)

Julie of the Wolves, by Jean George. Copyright 1972. Harper Collins Publishers, New York, New York. A young Inuit girl, lost in the Alaska wilderness, survives by being accepted by a pack of Arctic wolves. (Fiction)

The Tracker, by Tom Brown Jr. Copyright 1978. Berkley Books, New York, New York. Tom Brown's true-life apprenticeship as a young boy to an Apache Indian tracker, Stalking Wolf. The lessons Tom Brown learned include how to wait, how to listen, and how to see. (Non-Fiction)

Boy Scouts of America Handbook and Fieldbook. Copyright 1990 & 1984. Boy Scouts of America, Irving, Texas. Two excellent sources for campfire building skills and wilderness safety, as well as many other outdoor living topics.

Tom Brown's Field Guide to Nature and Survival for Children, by Tom Brown Jr. Copyright 1989. Berkley Books, New York. Good information on tracking, camping, wildlife observation, and outdoor safety.

The Earth Manual, by Malcolm Margolin. Copyright 1975. Heyday Books, Berkeley, California. An informative, easy-to-read book about caring for the land, with many conservation projects.

The Way Nature Works. Copyright 1992. Macmillan Publishing Co., New York, New York. An illustrated resource for understanding the natural world.

Peterson First Guide to Astronomy, by Jay M. Pasachoff. Copyright 1988. Houghton Mifflin Company, Boston, Massachusetts.

Field Guide to the Birds of North America. Copyright 1983. National Geographic Society, Washington, D.C.

Field Guide to the Mammals, Peterson Field Guide Series, by William H. Burt. Copyright 1964. Houghton Mifflin Co., Boston, Massachusetts.

Pond Life, by George K. Reid and Herbert S. Zim. Copyright 1967. Golden Press, New York, New York. Easy to read and use.

Sierra Club Naturalist's Guide Series, Sierra Club, San Francisco, California. Informative regional field guides.

Keepers of the Earth, Keepers of the Animals, and Keepers of the Night, by Michael J. Caduto and Joseph Bruchac. Copyright 1988, 1991, & 1994. Fulcrum Publishing, Golden, Colorado. Native American stories, natural history information and activities for children ages 5 through 12.

Guidelines for Campfire Safety and Disposal of Human Waste

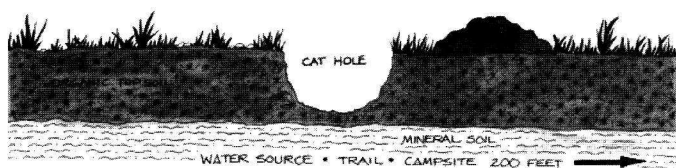
(Excerpted from the *Boy Scout of America Handbook* and *Fieldbook*)

Human Wastes

Disposing of human waste outdoors requires special care. If you are by yourself or with a small group, dig a cathole.

Find a secluded spot at least 200 feet (75 steps or more) from water, campsites, and trails. Use your heel or a camp shovel to dig a shallow hole no more than 6 inches deep. Organisms in the top layers of earth will break down human waste and small amounts of toilet paper. After you have used the cathole, fill it with soil and replace any ground cover.

Bury nothing in a cathole except human waste. Animals will dig up buried garbage and scatter it around. Materials such as plastic, glass, metal, and cardboard may take many years to decompose. Take all your trash home with you. "If you packed it in, you can pack it out."



Campfires

From the moment you light a fire until it is completely out, it is your responsibility to keep it under control.

Making a Safe Fire Site

If the ground cover is fragile, or if the forest is dry, or if the wind is strong, or if wood is scarce, or if there is a chance of creating a new scar on the

land, responsible campers forego open fires.

However, when conditions are safe, and proper permits have been obtained, group members can make a fire just big enough for their needs, then dismantle it so that not the slightest clue remains that the fire site ever existed.

A safe fire site is one on which nothing will burn except the fuel you use to feed the fire. It's also a spot from which flames cannot spread.

Choose a spot on gravel, sand, or bare soil, well away from trees and bushes, dry grasses, and anything else that might burn. Look overhead for branches that sparks could ignite. Stay clear of boulders that may be blackened by smoke, or large tree roots that might be harmed by too much heat.

Clean the fire site down to bare soil, then remove all burnable material from the ground around it. The cleared circle should be 10 feet or more across. Rake away pine needles, leaves, twigs, and anything else that could catch fire from a flying ember. Save the ground cover so that you can replace it when you are done with your fire. Keep a pot of water close to the fire site for emergencies.

If the site is grassy, use your camp shovel to cut around and under a two-foot-wide square of sod. Lift out the loosened sod, lay it right side up in the shade, and sprinkle it with water. The grass should stay fresh until you replace it as you break camp.

Archaeologists uncovering the remains of ancient civilizations find rocks still smudged by fires that burned thousands of years ago. Before building a fire on bare rock, put down a two-inch layer of sand or soil; otherwise, your fire may leave a permanent black stain. If you scatter the protective layer when you are done, the stone should be unmarked.

Putting out a Fire

Extinguish every fire when it is no longer needed. Make sure it is **COLD OUT**, not just out. That means the ashes are so cool you can touch any part of the fire with your hands.

With water: Splash water on the embers. Stir the damp ashes with a stick and splash them again. Turn smoldering sticks and wet them on all sides. Use plenty of water. Repeat until you can touch every part of the fire.

Without water: When water is scarce, work sand or dirt into the coals. Keep stirring soil

through the fire until it is out. Rub burned sticks against the ground to extinguish embers. Give the fire the *COLD OUT* test by touching the dirt and dead ashes with your hands.

Cleaning a Fire Ring

After extinguishing a fire in an old fire ring, pick out all bits of paper, foil, and unburned food, and pack them home in a trash bag. Bury the ashes. Leave the fire ring clean for other campers.

Erasing a Fire Ring

If you've made a new fire ring, it's best to take it apart and erase all evidence of your fire. Scatter any rocks, turning their blackened sides to the ground. Bury cold ashes and replace ground cover and sod, and toss away extra firewood. When you're done, the site should look just as it did when you found it.

Listing of Quotations & Stories

Guidelines:

Page 8: Turn them loose..." John Burroughs

Visit One

Page 11: "Walk away quietly ..." John Muir, *The Wilderness World of John Muir*, edited by Edwin Way Teale, page 311. Copyright 1954. Houghton Mifflin Co., Boston, Massachusetts.

Page 14: Pine marten

Page 18: "wandering through the jungles..." Jim Corbett. *Man-Eaters of Kumaon*, page xvii.

Copyright 1946. Oxford University Press, New York, New York.

Page 24: Claude Monet

Page 25: "For observing nature, the best pace..." Edwin Way Teale

Page 26: George Washington Carver

Visit Two

Page 30: Orchard Birds

Page 32: Tom Brown Jr. and Stalking Wolf

Page 37: "Pelorus Jack," by Cyrus Cress, found in *The Audubon Book of True Nature Stories*, selected and edited by John K. Terres, pages 113-118.

Copyright 1958. Thomas Y. Crowell Company, New York, New York.

Page 38: "let me name all the new birds..."

Ohiyesa (Charles E. Eastman), *Indian Boyhood*,

pages 52-53. Copyright 1902. University of Nebraska Press, Lincoln, Nebraska.

Page 42: "When we try to pick out anything..."

John Muir, *Son of the Wilderness: The Life of John Muir*, by Linnie Marsh Wolfe, pages 123-124.

Copyright 1973, University of Wisconsin Press, Madison, Wisconsin.

Visit Three

Page 46: Story of Godo Nakanishi, thanks to Hiraku Haga

Page 48: Family of beaver

Page 48: "the clearing became alive with monkeys..." J. Allen Boone, *The Language of Silence*, page 70. Copyright 1970. Harper & Row Publishers, New York, New York.

Page 53: Fable of the two dogs

Page 53: "This world is so beautiful..." Ralph Waldo Emerson

Page 53: "With beauty before me ..." from *American Indian Poetry*, edited by George W. Cronyn. Liveright/W.W. Norton Co., New York, New York.

Page 56: The story of the wise man is based on similar stories in the *Srimad Bhagavatam*.

Page 57: "We always have considered our wild animals ..." The Dalai Lama of Tibet, *My Tibet*, page 61. Copyright 1990. University of California Press, Berkeley, California.

Pages 58-59: Haiku poems by Basho and Buson, *Haiku Harvest and Cherry Blossoms*. Peter Pauper Press, White Plains, New York.

Visit Four

Pages 61-63: Story of Stickeen, John Muir, *Stickeen*, pages 33, 48, 53-54, 57, 61, 63-64, 68-70. Copyright 1909. Heyday Books, Berkeley, California.

Page 65: "Did you know trees talk?" Walking Buffalo, *Touch the Earth*, compiled by T.C. McLuhan, page 23. Copyright 1971. Simon & Schuster, New York.

Page 65: "enlarged my life, extended its boundaries." John Muir, *John of the Mountains: The Unpublished Journals of John Muir*, edited by Linnie Marsh Wolfe, page 277. Copyright 1938. University of Wisconsin Press, Madison, Wisconsin.

Page 65: Zoo gorilla



Page 68: "If you love it enough..." George Washington Carver

Page 69: "Human and animal love..." John Muir, *John of the Mountains: The Unpublished Journals of John Muir*, edited by Linnie Marsh Wolfe, page 277. Copyright 1938. University of Wisconsin Press, Madison, Wisconsin.

Pages 72-73: "One day I was playing in the mud of a rice field..." Paul Brand, *A Handful of Mud: A Personal History of My Love for the Soil*, found in *Tending the Garden*, edited by Wesley Granberg-Michaelson. Copyright 1987. William B. Eerdmans Publishing Co., Grand Rapids, Michigan.

Page 81: "'The Giving Tree': Alison and the Sugar Pine," condensed from Chris Bowman's article in *The Sacramento Bee*, May 11, 1993, page 1. Copyright 1993.

Page 82: Story of John Muir and Teddy Roosevelt from *Son of the Wilderness: A Life of John Muir*, by Linnie Marsh Wolfe, pages 289-293. Copyright 1945 by Alfred A. Knopf, Inc., New York, New York.

Visit Five

Page 91: "[Nature] is never the same..." Clarence Dutton, *Tertiary History of the Grand Canyon District*, published in 1882.

Page 96: "When alone at night..." John Muir, *John of the Mountains: The Unpublished Journals of John Muir*, edited by Linnie Marsh Wolfe, page 295. Copyright 1938. University of Wisconsin Press, Madison, Wisconsin.

Page 98: "To enable my 8 camels ..." Sir Francis Younghusband, *The Heart of Nature*, pages 116-118. Copyright 1921. John Murray, London, England.

Page 99: "After arrival in camp ..." Sir Francis Younghusband, *The Heart of Nature*, pages 167 & 168.

Page 101: "The time to hear bird music..." Donald Culross Peattie

Pages 105-106: A retelling of *The Man Who Planted Hope and Grew Happiness* by Jean Giono. Thanks to Friends of Nature, Brooksville, Maine, 1967.

Page 107: Woman and starfish

Page 107: Value of rope pumps in a village in Nicaragua

Page 110: "The Birds of the Air," Joseph Cornell, *Listening to Nature*, page 25. Copyright 1987. Dawn Publications, Nevada City, California.

Leader's Guide

Page 112: "If a child is to keep alive..." Rachel Carson, *The Sense of Wonder*, page 45. Copyright 1956. Harper & Row Publishers, New York, New York.

Pages 118-119: Campfire safety and human waste disposal, *Boy Scouts of America Handbook* pages 50, 82, 83, and 93, and *Fieldbook*, pages 100, 101, and 111. Copyrights 1990 and 1984. Boy Scouts of America, Irving, Texas.