

A PARENTS' GUIDE TO NATURE PLAY

How to Give Your Children
More Outdoor Play
...and Why You Should!

by Ken Finch
Green Hearts INC



We need to give them (children) time outdoors, where they can meet and savor the world that humans have not made – pill bugs on a sidewalk, a swarm of tadpoles in a puddle, a tree for climbing, a sky aflame with sunset, a kiss of wind.

— Scott Russell Sanders,
"A Conservationist's Manifesto"
in *Coming to Land in a Troubled World*



... a ditch somewhere – or a creek, meadow, woodlot, or marsh ... These are places of initiation, where the borders between ourselves and other creatures break down, where the earth gets under our nails and a sense of place gets under our skin.

... Everybody has a ditch, or ought to. For only the ditches and the field, the woods, the ravines – can teach us to care enough for all the land.

Robert Michael Pyle,
The Thunder Tree

INTRODUCTION

What are your favorite memories of childhood play?

If you're like millions of other Americans, most of these memories happened outdoors and included a lot of nature-based play. For instance:

- digging holes "to China,"
- catching fireflies and frogs;
- exploring little creeks and ponds;
- building stick forts or tree houses;
- daydreaming in your secret spot; or
- just "mucking around" in the woods.



Do your own children play that way?

Chances are, they don't. Childhood has changed. American kids now spend 27 percent of their time with electronic media: video games, television, computers, and recorded music.¹

How much of their time do they spend outside? One percent, on average.² And that includes highly structured, adult-led activities like soccer and baseball leagues.

"Unstructured" outdoor play — that is, make-it-up-as-you-go free play — amounts to only about 30 minutes per week for each of our children.³ That's barely four minutes per day. Yet American two-year-olds average 2.6 hours of television viewing per day!⁴

That's a dramatic change from past generations when one of the most common parental commands was, "Go out and play!" And for many children of the Baby Boomer generation, the only rule for that outside play was, "Be home by the time the streetlights come on."

WHAT HAPPENED TO OUTDOOR PLAY?

No one intentionally removed "nature play" from childhood, but several key changes have happened over the past 25 to 30 years.

- We've become more urbanized. Today, children's access to green play spaces is often more distant and/or more dangerous than it was in the past.
- Children's free time has diminished due to longer school days and many more after-school activities, such as team sports, music lessons, tutoring, church groups, etc.

Kids' free time dropped by 38% between 1979 and 1999.⁵

- Parental fears have been magnified by "24/7" media coverage of all dangers to children, whether they are sunburns, bee stings, coyotes, or crime. Most are exaggerated, but few parents can ignore the steady flow of worrisome news.
- We also fear lawsuits. It often seems like there is no longer such a thing as a simple accident. If a child is hurt playing outside, then someone is to blame — and someone can be sued. Consequently, fewer sites allow active outdoor play.
- And then there's everyone's favorite villain: plugged-in play. Cable television, digital music devices, home computers, and video games have all been developed over the past 30 years. They have been a major factor in the disappearance of outdoor play.



Taken together, these changes have created a "perfect storm" against children's outdoor play. As a result, childhood has changed dramatically and very rapidly — and we don't even have a hypothesis about what the long-term impacts will be!

WHY DOES IT MATTER?

For countless generations, nature play has been a defining part of childhood. Yet only recently have we begun to grasp its powerful and positive impacts on children's healthy growth and development.

- Regular habits of active play during childhood are one of the best predictors of active adulthoods⁶ — a perfect prescription for combating the obesity epidemic.
- School children who use playgrounds with trees, fields, shrubs, and vegetated edges show more creative play, better concentration, and more inter-gender play than peers with equipment-focused playgrounds.^{8,9}
- Outdoor play in green settings reduces the symptoms of attention-deficit hyperactivity disorder in children.¹⁰
- According to the "hygiene hypothesis," early exposure to plants, animals, and soil helps children's immune systems to develop properly, making them less vulnerable to allergenic conditions like asthma and peanut allergies.¹¹
- Frequent, unstructured childhood play in natural settings has been found to be the most common influence on the development of life-long conservation values.¹²

One in five four-year-olds in the U.S. is clinically obese.⁷

The virtual extinction of nature play is an unprecedented mutation of human childhood.

We have unintentionally removed a life force that has been at the center of children's physical, social, emotional, creative, and intellectual development throughout the history of humankind.

Are you confident that nature play has been replaced in most children's lives by equally valuable and positive influences? At Green Hearts, we do not think so — and we are finding that most parents instinctively agree.

THREE KEYS FOR GREAT NATURE PLAY

The first step in restoring nature play is to understand it. Green Hearts promotes three vital attributes for the best nature play.

1. The right kind of place

Good nature play requires land that is not too protected and is wild — *at least in children's eyes*. This might be the "back forty" of their farm, a quiet corner in a local park, a small neighborhood creek or marsh, a vacant city lot, or just their own backyard.



However large or small, the site must have elemental nature to play with and discover: things like rocks, dirt, trees, bugs, flowers, mud, and water. Equally important, kids must be free to dig, collect, climb, build, and hide there. This has been called "rough ground" — patches of land that adults don't much care about, but that kids can love and adopt as their own. *It's not the size, it's the freedom!*

2. The right kind of play

Outdoor, "child-centered" play is the goal: play that children themselves initiate, guide, change, or abandon. The very best nature play comes from the child, not from the adult!

Ideally, there are no formal objectives and few rules for nature play. It is vital, though, that the play actively engages kids with nature and its elements; it's not just any play that happens outdoors. Putting your ping-pong table in the backyard is not nature play!

Real nature play is catching tiny critters, collecting leaves and rocks, hiding in tall grass, digging for buried treasure, splashing in the creek, hiding amidst the shrubs, and climbing a tree as high as you dare. *It's about playing with nature, not just in nature!*



3. The right kind of re-play

In her research into the origins of personal conservation values, Louise Chawla found, "The special places that stood out in memory, where people formed a first bond with the natural world, were always part of the regular rhythm of life."¹² (italics added). That's how many of us enjoyed nature play: we played outdoors nearly every day, again and again, in good weather or bad.

This level of frequency may be the hardest aspect of nature play to restore — since, for children, frequency requires proximity. If kids have to be hauled around in the family minivan in order to enjoy nature play, then it's not likely to happen often enough to fully impact their growth, development, and love of nature.

Instead, we need to bring nature play back into our families' yards, local green spaces, and school playgrounds — places they can reach on foot or by bicycle, day after day, to play and re-play. *"Yearly nature" is the key to restoring frequent nature play!*

The right kinds of place, play, and re-play: put these together and they will make great nature play. But your child's outdoor fun doesn't have to perfectly match all three in order to be worthwhile!

- If there isn't a creek or vacant lot near your house, use a corner of your backyard as your kids' own rough ground.
- If the local park won't allow digging holes or catching frogs, you can still let your children decide where to explore in the park and what to do next.
- If your kids can't get outside to play every day, then once or twice a week will still be great!

Consider what makes great nature play, but don't worry about perfection. Open the door and get your kids started!



HOW CAN PARENTS RESTORE NATURE PLAY?

If you want to give your children the gifts of good health and a life-long love of the outdoors, then bring frequent, unstructured, nature-based play into their lives. It will be the crucial first step in "growing up green!" The following pages provide a few simple ideas and resources for getting started.

SHOW YOUR KIDS THE DOOR!

As a parent, you are the key to your children's nature play; you are the "gatekeeper." It is important that you regularly encourage their outdoor play and "nudge" them outside, away from the common electronic devices that mesmerize so many children.

If they are not used to playing outside, you may quickly hear complaints like, "I'm bored," and, "There's nothing to do out here." Don't give in! Children have an incredible talent for making up play, but it may take them awhile to get going. You can set an example: be the first one to splash in



the mud puddle, roll down the hill, or climb into the tree. They'll soon get the idea — and then you can withdraw and let your kids play!

As they play outside more often, challenge your kids to explore your own yard and find things they've never noticed before, or things that have changed since last week. When they do, show genuine interest in their discoveries. And don't fret if their play causes minor damage to your plants: it's a small price to pay for good play!

The world is mud-splattered and puddle-wonderful.
-- as always

"KIDSCAPE" YOUR YARD

There is no better place to begin restoring frequent nature play than in your own yard, even if it's a small one. It is handy, familiar, needs no auto transport, and is relatively easy for you to supervise.

Home yards can provide especially good nature play for young children, about ages two to eight. Their interests will tend to focus on tiny, concrete discoveries rather than the "big picture."

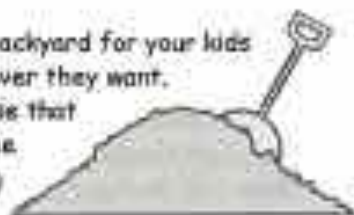


So while you may exclaim over a glorious sunset, your young children will more likely be captivated by "rollie-pollie" bugs, a sweet smelling flower, or a mysterious hole in the flower bed.

Your yard can provide *countless* fascinations on that scale, especially if you are willing to make a few changes. Most American yards are rather sterile, dominated by turf grass, a few shrubs and flowers, and a tree or two. But you can enhance your yard's nature play value by increasing its natural "richness." Note, though: it's best if you're OK with a yard that looks a bit more "messy" than the manicured, chemical-saturated model that's so common in the U.S.

Here's a sampling of not-too-hard and not-too-expensive ideas for this sort of "kidscaping."

Rough Ground: Set aside part of your backyard for your kids to dig, build, hide, plant, or do whatever they want. You might even write up a simple lease that gives your children "ownership" of the chosen spot, and then have a "signing ceremony" with them!



Digging Pits: Create a 10-foot-square digging area by removing grass and loosening the soil with a garden fork or shovel. If you have heavy clay soil, you may want to lighten it by mixing in a few bags of sand. Provide small shovels, spades, and buckets, and let your kids "dig in!" *Note:* Digging pits turn into giant mud puddles after a rain. Your kids won't mind a bit, but have boots handy...

Dirt Pile: Large mounds of loose dirt are an endless joy for kids — sort of like a digging pit in reverse. The larger, the better!

Water: Kids love water play! Provide water from a hose, a faucet, a sprinkler, a rain barrel, or even spray bottles. And supply ways to move the water around, since that's half the fun: buckets, milk jugs, watering cans, hollow bamboo poles, plastic pipes, etc.

Seating: Kids cherish quiet time outside, too, so create one or more sheltered spots in your yard where they can just sit, daydream, and plan their fun. Equip them with a small Adirondack chair, a tall swing, a hammock chair, a comfy bench, or a real hammock.

Shrubberies: Plant shrubs in loose groups to create little nooks that will be kid-sized hide-aways. Weeping varieties can form their own "secret" spaces, and a hidden crawlway can be created by planting arching shrubs in front of a solid fence.



Plants, Plants, and More Plants! Try to grow plants in every available spot in your yard! For the best nature play, use a mix of ferns, tall grasses, perennial flowers, trees, and still more shrubs. Native, wildlife-attracting species are the best choice. Limit your amount of turf grass!

Play Log: A large log can be a fort, a balance beam, a bench, a play table, or a hiding space for your children. If you don't have one lying around, ask a local tree service for one they have cut down. Stake it down or partially bury it, so it can't unexpectedly roll.



Trees to Climb: Have kids ever grown up without climbing trees? If you have a strong, spreading tree, you can help by hanging a rope ladder from the lowest limb or by bolting wooden climbing cleats on the trunk. Deep mulch underneath will help cushion any slips.

Rocks & Boulders: Large, smooth boulders (beach ball size or bigger) can be great for climbing and pretend play — either alone or in a jumbled "boulder mountain." If you don't have large rocks in your yard, you can buy them and have them delivered.



Veggie Garden: All children should have the chance to tend a little vegetable garden. Sugar snap peas, radishes, corn, carrots, potatoes, and cherry tomatoes are all good choices, and are easy to grow. Help them thrive by enriching the soil with compost.

Berries: In addition to the veggies, plant a few berry bushes — blackberries and raspberries are classics. There's something very kid-appealing about eating ripe berries right off the bush!

Construction Zone: Rustic, kid-built forts, playhouses, and other "dens" and shelters have long been a part of nature play. Provide an ample supply of "loose parts" to build with: branches, sticks, boards, milk crates, small tarps, large sheets of cardboard, etc.

Birdhouses: Kids enjoy watching birds use nest boxes. Swallow, wren, or bluebird boxes are good choices to mount in your yard. You can also purchase artificial houses for toads, bats, butterflies, and bees; all will add child interest to your yard!



Discovery Board: Lay a piece of scrap plywood, roughly two feet square, in a quiet corner of your yard. Leave it for a few days, and then periodically look to see what's moved into the micro-habitat beneath it. Likely residents will be pill bugs, ants, slugs, millipedes, and other mini-beasts that kids love. (Note: It's best to skip this idea if venomous snakes are common in your area.)



Leaf Piles: Rake fallen leaves into giant piles and let the kids have at 'em! Better yet, let your young kids do the raking — they will actually enjoy it! After the leaves lose their appeal, put them in your shrub and flower beds to decompose and enrich the soil.

Fragrance: Plant fragrant herbs in places where your kids play. Try groundcover thyme (many types and scents), lawn chamomile, and Corsican mint on walking paths, and mints or scented geraniums in beds. They'll smell wonderful when picked or walked on!

Butterfly Garden: Clear 50 to 100 square feet of ground for a butterfly haven, and plant it with flowers like yarrow, rudbeckia, milkweeds, coneflowers, Joe Pye weed, and verbena. Throw in a little parsley and dill for the caterpillars to eat.



Milkweed & Monarchs: If you have milkweed, you'll get Monarch caterpillars — that's all they eat! Cut a branch with a Monarch caterpillar on it (easy to identify with a field guide or the internet) and put it in a screened box.



Supply fresh milkweed leaves until the caterpillar forms a beautiful, hanging chrysalis — likely in less than a week. Nine to 14 days later an adult butterfly will emerge from the now-transparent chrysalis. Be sure there is room for its wings to fully open so they will not be deformed, and release the adult within a few hours. This is a truly magical process that every child and adult should see!

Fire Pit: A backyard fire pit is the perfect place for kids to learn to tend and respect fire, under their parent's watchful eyes. Add in a few s'mores, maybe hot dogs on a stick, and a ghost story or two and presto: a great backyard activity for your whole family!



Plant Houses: Grow sunflowers in a hollow square, about five or six feet on each side and with a small "door" opening. Alternate seeds for tall and short sunflowers (there are many varieties), so they will grow into solid "walls" and a very unique playhouse!



You can also use long garden stakes or bamboo poles to make a teepee frame about six feet high. Plant climbing beans, squash vines, or morning glory vines to grow up and around the poles. By late summer you'll have a green teepee for your kids' play!

PLAY AS A FAMILY

Free choice, kids-only outdoor explorations are the "best and highest" form of nature play, but family activities can also add to the fun! There are many books available with great ideas for these family nature activities, but here are a few to try in your own yard.

Backyard Campouts: All you need is a basic tent, sleeping bags or blankets, a few snacks, a flashlight, and a nice evening. This can be a real adventure for young children — yet bathrooms, more food, and a rain refuge are just steps away!



Picnic Under the Stars: If your kids don't want to sleep out, have a backyard picnic after dark, instead. Even better, plan a midnight picnic during the Perseid meteor shower in mid-August. (Check with your library or the internet for each year's exact dates.)

Plant Things! Planting trees, shrubs, and flowers with your children is a great way to help them bond with their own yard. They will have a special feeling for every plant they help start!

Warm Baiting: On a hot summer eve, hang a white bed sheet on your deck or in your yard, and shine a bright light on it for at least 30 minutes (ultraviolet is best, but regular bulbs will work). You'll be amazed at the moths and other night-flying insects that show up!

You can also entice moths with "bait" made from old beer, rotting bananas, and sugar or molasses. Let this "brew" in a dark, warm place until it stinks. Then pour it on tree trunks, and return after dark with a lantern and a field guide.



Walk in the Creek! If your yard or neighborhood has a shallow stream, try walking in it. You'll likely find frogs, water striders, and other insects. Look under creek rocks, too, for weird-looking dragonfly larvae. (Be sure to put the rocks back in the same spots.) Wear old tennis shoes or boots for this excursion.

Ho! in the Rain! No nearby creek? Then play in the rain on a warm day. Stomp in the mud, slide down a slippery grass slope, catch worms, or just lie down and let the rain fall on your face.



"Walk the Acres!" Take a short daily walk around the yard with your children, searching for anything new or interesting. This is especially rewarding during the springtime and early summer, when nearly every day can bring a new plant, insect, or bird!

Build a Birdhouse: A simple birdhouse is easy to build with basic tools. Get instructions from the library, a nature center, or the internet, and be sure to follow the guidelines for where to mount it and how high it should be. Feathered tenants will soon arrive!

Feed the Birds: Put out a bird feeder or two. Use hanging tube feeders filled with black oil sunflower seed or niger seed, and buy the right feeder for each type! Hang them near a window, have a bird guide handy, and keep a journal of the birds you see. Try a hummingbird feeder, too!

Scavenger Hunt: Search your yard for natural objects, colors, or shapes. Take turns with your kids to make up the search lists.

Look it Up! Once your kids begin loving the outdoors, they'll want to know what they've found — so keep a few field guides in the house. *Golden Guides* and *Peterson First Guides* are good for beginners; the larger *Peterson Guides* series gives more detail.



Show and Tell: Encourage your kids to show you what they find outside, and give them a little dedicated space where they can display their treasures (well, at least the non-living ones...).

Today's young children are constrained by the expectations, schedules, whims, and rules of adults. Play is the only time they can take control of their world.
— Sheila G. Ploover



KEEP NATURE PLAY TOOLS AND TOYS HANDY

Nature itself provides curious children with an endless variety of toys, but there are also human-made devices that can enhance their nature-based play. Here are a few good ones.

Earth Movers: These are a must, since kids just love to dig in mud, sand, and pea gravel! Supply shovels, spades, rakes, hoes, buckets, plastic barrels, etc. — and get children's sizes. Keep a child's wheelbarrow handy, too!

Binoculars: Buy a basic pair (\$50 or less) for your kids (they're sure to get banged up). A 7 X 35 size is good for most children. Focus adjustments are tricky for preschoolers, though, so let them use a play pair made out of two empty toilet paper tubes.

Magnifiers: Look for large ones — at least 3 inches in diameter. Another good option is a magnifier stool: a large magnifier with three wooden legs. Check the internet for these.

Bug Copes: Kids love to capture insects such as fireflies, praying mantises, and butterflies, so keep a small bug cage on hand. Make one using screening and a box, or use a jar with air holes in the lid. Encourage the early and safe release of all captives!



Nets: Speaking of catching bugs, you'll want a net! Inexpensive butterfly nets ("air nets") are sold in toy and hobby stores; look for long handles and long netting. Sturdier aquatic ("dip") nets are also handy to have if there's a creek or pond nearby. Check science supply stores for these.



Cameras: Give your children inexpensive digital cameras to "hunt" with! Another fun option is to mount a motion-activated "scout camera" in your yard (get a digital one with a flash, at outdoors stores). These can reveal what's visiting your yard at night!

KEEP IT SAFE!

Nature play is no more dangerous than many other things that kids often do — like running down stairs, playing football, riding in a car, or jumping on a trampoline! And while outdoor play does have risks, it also brings real developmental benefits (see pg. 3).

You should always consider safety, of course, but don't obsess over tiny dangers. The most common cause of children's accidental death is auto accidents, but you still drive your kids places, don't you? Do not let equally manageable dangers keep your kids away from nature play. Ultimately, your children must learn to judge risks, gauge their limits, and practice responsibility. Isn't it better for them to learn these skills by climbing backyard trees at age eight, then to wait until they are 16 and behind the wheel of a car?

Here are a few tips to keep your children's nature play safe.

Insects: Have your kids use insect repellent and wear long sleeves, long pants, and shoes; tuck the pant legs into socks to keep out ticks. Teach them to be especially alert for yellowjacket hornets, which aggressively defend their underground nests. Have your kids watch for "bees" coming and going from a spot on the ground, and then avoid that area!



West Nile Virus: This virus is spread by mosquitoes, but less than one percent of people who are infected ever become severely ill. Use the insect repellent practices above, and lessen mosquito breeding by avoiding any stagnant or standing water in your yard.

Bird Flu: The dangerous strain of bird flu has not been found in North America — neither in people nor in birds that can carry it.

Poison Ivy, Poison Oak, and Poison Sumac: Help your kids learn to recognize these. If exposed, wash the area with water and strong soap, but don't scrub too hard. Over-the-counter lotions usually help, but if blisters form, call your doctor.



Stinging Nettle: This common plant causes a burning itch, but it only lasts a few minutes. Teach your children to recognize it.

Other Poisonous Plants: There are many species of poisonous plants in the U.S., though most cause only skin irritation or stomach distress. Nevertheless, teach your kids not to eat any plant part you haven't approved, and learn the poisonous plants in your area. Search at www.hort.purdue.edu/ext/poisonousplants.html.

Water: Get your children swimming lessons at a young age, and teach respect and caution for all water bodies.



Weather: In very hot weather kids should avoid outdoor play in midday, wear light and loose clothing, and drink lots of water. In cold weather they should dress warmly with a good hat and be sure to promptly change out of any clothes that are soaked through.



Sunscreen: A little sunshine is good for humans; too much is bad. Routinely put sunscreen on your children, and have them wear comfy hats with brims.

Snakes: Venomous snakebites are rare, and rarely fatal. However, if venomous snakes live in your area, teach your kids to recognize them. They almost never bite humans unless disturbed.

Other Wildlife: The danger from other wild animals is very small, but teach your kids to respect wildlife and to stay away from any animals that act strange or sleepy, seem too friendly, or look ill.

Stranger Danger: All kids should be taught to be cautious with any unknown person, and how to react if attacked. However, crimes against children are no more common than a generation ago, and excessive fear is uncalled for unless there have been crimes against kids in your neighborhood. Playing outside with friends, either at or very near to home, will remove most of the danger.

Germs: Germs travel from person to person. The things your child will probably handle while playing outside are less likely to transmit germs than a doorknob at school or a toy at a store! Do teach your children, though, to never touch mushrooms or litter, to avoid handling turtles, and to wash their hands well if they have had contact with water that might be polluted.

SPREAD THE WORD!

Societal understanding of the importance of nature-based play is growing, but many parents are still unaware. You can help them understand by bringing the message to PTA meetings, book clubs, local school boards, park districts, and other community groups that share a concern for children.



The best place to learn more about nature play and the many related initiatives is on The Children and Nature Network's website, www.childrenandnature.org. There you'll find research data to support your conversations, inspiring stories, and ideas to bring to your own area, like Family Nature Clubs. More good information is on Green Hearts' website: www.greenheartsonc.org, and at the MORE Nature site: www.morenature.info.

Restoring nature play for your own children, in your own yard, is the perfect first step. Then, after you see how well that works, consider extending your commitment to a "larger stage." Could your elementary school create a nature play area on its playground and have it open to the whole community on evenings and weekends? Have nearby parks opened areas for active nature play, with relaxed rules? Does your neighborhood have a piece of rough ground that could be enhanced for nature play?

Any place where children regularly play is a potential site for the restoration of nature play — but that potential will only be realized through the efforts of caring parents like you!

ABOUT GREEN HEARTS

Green Hearts is a nonprofit conservation organization dedicated to restoring and strengthening the bonds between children and nature. We teach, train, and speak nationwide about the importance of nature play and how it can be restored. Green Hearts is also developing our first play-focused "children's nature center," near our headquarters in Omaha, Nebraska.

A FEW HELPFUL RESOURCES

Books

- Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*, by Richard Louv, 2006
- The Thunder Tree*, by Robert Michael Pyle, 1993
- Sensory Childhood: Letting Children be Children in Our Achievement-Oriented Society*, by William Crain, 2004
- Nature's Playground – Activities, Crafts, and Games to Encourage Children to Get Outdoors*, by Peter Davis and Jo Schafelt, 2005
- A Child's Garden*, by Holly Sommerer, 1998
- The Geography of Childhood* by Stephen Trimble and Gary Paul Nabhan, 1994

Websites

- The Children and Nature Network: www.childrenandnature.org
- The Green Hour, National Wildlife Federation: www.greenhour.org
- Nature Rocks: www.naturerocks.org
- Green Hearts Institute for Nature in Childhood: www.greenheartsinc.org
- The Natural Learning Initiative: www.naturallearning.org
- Matrix Omaha Resources for Exploring Nature: www.matrixomaha.org

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Ken Fink, author



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Ideas or Suggestions?

If you have comments or suggestions about this Parents' Guide, Green Hearts
would love to hear them! Please email us at info@greenheartsinc.org.

Green Hearts Institute for Nature in Childhood

3000 West 14th Street, Omaha, NE 68107-1009
402-394-8111 Fax 402-394-8112

info@greenheartsinc.org www.greenheartsinc.org

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