



WELCOME

Neighborhood Explorers - Visit Our Neighborhood, Then Go Outside in Yours!

The U.S. Fish and Wildlife Service has launched the Neighborhood Explorers (NX) website! Designed in partnership with Utah State University and LetterPress Software specifically for 8-11 year olds, their educators and caregivers, the website is geared to reach those children not currently participating in outdoor programs and activities.



Discovery is as easy as a click of the mouse. Exploring the Club-House, users can seek and identify birds by silhouette, learn about endangered and invasive species, find Sam the praying mantis, take "Lucy's NX Challenge" and more. Just moving the mouse around the Club-House will take the user to new places. Explorers create nature reports and see their state's Top Explorer. They earn patches as they complete projects, answer trivia questions and play games. Action projects include building bird houses, planting native plants, and adopting new habits, such as recycling and conserving water and electricity.

By earning all five patches, players can receive a free tree from the Arbor Day Foundation! After earning all five patches, participants will be directed to the Arbor Day web site, where they can provide their name and address to get a free tree with directions for planting. There are only 450 trees available, so players should get started winning patches right away!

The overall goal of the Neighborhood Explorer game is to meet the audience where they are – on the computer – and offer a "safe" place to explore nature. Then, as their comfort level grows, explorers are encouraged to go outside to explore their "real" neighborhoods.

One challenge faced by LetterPress Software was to develop a virtual Club-House that could become a real clubhouse. The hope is that nature centers, youth groups, schools, national wildlife refuges and others will use the website's projects and activities to start their own real world Neighborhood Explorers Club.

Through its Neighborhood Explorers website and other activities of the Let's Go Outside: Ensuring a Legacy of Conservation priority, the U.S. Fish and Wildlife Service creates a foundation to support Department of the Interior Secretary Salazar's "21st Century Youth Conservation Corps".

Check it out for yourself. Visit our Neighborhood Explorers website at <http://www.fws.gov/neighborhoodexplorers>. For more information, email us at letsgooutside@fws.gov

By Matt Gay, US Fish and Wildlife Service National Conservation Training Center.

NX Goals

1. Children will spend more time playing in nature, under adult supervision.
2. Children will be able to recognize some elements of nature in their area.
3. Children will demonstrate an attitude of stewardship by describing what they can do to protect their local environment.

Going Green Has Never Been So Fun!

One of the first steps to caring for our environment is getting to know and love it. For those of us who grew up playing outside until the street lights came on, this is not an alien concept. That said, those days are gone and many kids today are missing out on the opportunities that help foster the connection to nature and connect with the world we live in.

Before we ask kids to save the world, we have to give them the chance to get to know it for the sheer beauty and wonder of it: to dig in the dirt, climb trees, sleep under the stars and wade in creeks. Kids need to know the feeling of grass under their feet, sand between their toes, and the joy of watching birds, squirrels and butterflies. They need to think of the planet as something to love and cherish, versus simply something to save.

Protecting the planet starts with one simple step: playing outdoors! Not only are there countless health, educational, developmental, and emotional benefits to outdoor play, but it is the first step on the road to going green. Simply put, you cannot save what you do not know. It's time to give kids the chance to know this beautiful planet we live on.

A great way to help bring play back to your community and to the lives of children and adults alike is to host a Play Day the week of September 19 -27th. This event can be whatever you choose to celebrate play and get your community outside!

Why not...

- Sponsor a community toy swap and park clean-up
- Host a family nature hike, fishing derby, or canoe trip
- Have a geocaching or letterboxing event
- Have a community garden day or a scavenger hunt that challenges families to explore the parks and trails in your community

KaBOOM! can help. Our Play Day Planner will walk you through the steps of planning a successful event in your community. Click here to register your Play Day today, and get started on bringing fun and play back to your community. Join people nation-wide as they celebrate play and connect with nature.

Additional KaBOOM! resources of interest: Play Space Finder: A free tool to help people find places to play nearby. People not only add spaces, but rank them and make comments on safety, etc. We have over 90,000 playspaces listed to date. (Feel free to add your sites!) Connect: KaBOOM! has an online community called Connect with over 20,000 members – people interested in play advocacy, building playspaces, cleaning up parks, and getting kids outdoors. (Feel free to set up a profile and connect with this great community)

By Beth Almeras | DIY Online Community/Communications Manager



Children play at the beach at Chincoteague National Wildlife Refuge in Virginia.
FWS image

Exploring the outdoors during "Take A Child Outside" week helps children discover the wonders of the natural world

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What do you remember doing outdoors as a child? For most adults, the list includes playing in creeks, walking in the woods, and watching for the first star in the twilight. For many children today, however, going outside only includes organized sports. You rarely see children climbing trees, building "secret forts" in the woods, or simply making mud pies. Children have become increasingly disconnected from the natural world. This separation can lead to feelings of stress, trouble paying attention, and a sense of being alienated from the world. Studies have also linked the lack of time outdoors to childhood obesity and increased attention deficit disorder behaviors. Inspired by Richard Louv's bestseller, "Last Child in the Woods: Saving Our Children from Nature Deficit Disorder," the North Carolina Museum of Natural Sciences launched the national "Take A Child Outside" week (September 24-30, 2009). It is designed to help break down the obstacles that are keeping children from exploring the natural world. The goal is to provide parents, teachers and other caregivers with resources such as places to visit and outdoor activities so that children will become reconnected with the natural world, and spend more time outdoors. The "Take A Child Outside" website (www.takeachildoutside.org) provides a place for parents to: make a pledge to take a child outside, find a partner organization and place to visit discover activities to do outdoors with children.



Exploring the outdoors during "Take A Child Outside" week helps children discover the wonders of the natural world

Several of the National Wildlife Refuges and regional offices have joined as partners in this effort. Currently there are partners in all 50 states and 4 foreign countries, and they range from locations with wonderful natural areas to explore, such as the refuges, parks and waterfront areas to organizations that support getting children outside, such as the "Leave No Child Inside" coalitions, education and health departments. There is no fee involved in becoming a partner, and if you would like to join please contact Liz Baird at liz.baird@ncdenr.gov or 919-733-7450 ext 601

KIDS

Explore Your Neighborhood with Species Explorer

People of all ages spend more time glued to the TV or the computer than outdoors. But outdoors is where the real 3-D action is! Species Explorer is a new tool that lets you keep track of interesting animals and plants you find, much like a scientist would. Imagine Darwin's nature journals updated for the 21st century...

Here are just a couple of ways you can use Species Explorer:

Map Your Yard

See how many kinds of animals visit your backyard. Sit outside with your camera or cell phone and snap a photo of each species you see. Upload your notes and photos to Species Explorer and soon you'll have a good understanding of who you share the neighborhood with. Scientists fear that many song birds and migratory birds are in decline – do your observations support this conclusion?

Alien Tracking

Invasive species are a serious environmental problem. In Massachusetts, for example, the zebra mussel has begun to invade formerly pristine waters. How many alien invaders lurk in your neighborhood? Japanese knotweed? The Asian longhorned beetle? Use Google Images, Flickr, or another tool to find out what these species look like. Then go hunting (with a camera!). Post your sightings on Species Explorer. Local conservation organizations may well appreciate your discoveries.

When you add a map to your Species Explorer account, users all over the world can see your postings and know where your discoveries were. Don't worry if you're not sure what species something is – post it anyway with a picture and a description. Another user might be able to help you out.

Species Explorer makes it easy to share your sightings with other social networks, and can send you an alert whenever someone comments on your sighting.

Get some friends to go out exploring with you. Map what's living in their yards and compare notes. You can add more than sightings to Species Explorer. Use it as an online nature journal and share stories about your outdoor adventures. Tell your teachers about Species Explorer – you could lead the class on an outdoor fieldtrip to document wildlife at your school.

Do you have an even better idea? We want to hear it! Email your project to info@speciesexplorer.org and we may feature you on the homepage. Find out more at SpeciesExplorer.org! www.speciesexplorer.org

By Maxim Antinori, Species Explorer



Taking a photo of an interesting spider on some nearby conservation land.

“Everybody needs beauty as well as bread, places to play and pray in, where Nature may heal and cheer and give strength to body and soul alike.”

-John Muir

John Muir, one of our country's foremost conservationists, spent most of his life advocating for the preservation of wilderness. He, among other great thinkers and writers, recognized not only the intrinsic value of wild places, but also the benefits they provide for the human mind and body. He believed nature can play an important role in teaching life-long lessons about ourselves and the world we live in.

Although many adults may not be able to articulate how nature, or the outdoors, shaped them developmentally, or helped create their value system, most adults will tell you that as a child, they played outside - in the woods, a creek, a backyard, or an empty lot.

Can younger adults, teens, and children say the same? Something began to change during the last 30 years. The once common sight of kids playing makeshift games outside shifted to kids playing indoors. Competition with media, perceived dangers of strangers, and lack of available outdoor spaces all contributed to this gradual change in our culture. This shift away from outdoor play and subsequent disconnect from nature may have consequences for our children's health as well as for the future of conservation.

Studies have shown that playing in the outdoors has helped children physically and psychologically. For instance: Recreating outside may help combat the rising epidemic of childhood obesity. Those who play in the outdoors are physically more active because outdoor spaces are usually more varied and less structured than indoor spaces. Being outside also sets the stage for childhood “discoveries” of the natural world which have more lasting impressions than learning about nature in a classroom. Children are more likely to develop a sense of place and a sense of imagination. And finally, children taking part in a week-long, residential outdoor recreation program were found to have increased confidence and self esteem.

In addition to the benefits of physical activity, a recent study conducted by the University of Illinois discovered that children with Attention-Deficit Hyperactivity Disorder (ADHD) have fewer symptoms after playing in the outdoors than when they focus on indoor play activities such as television or video games. This study also found ADHD kids were better able to concentrate, complete tasks, and follow directions after being outside.

Although the focus here is children, adults benefit from natural settings as well. Howard Frumkin, M.D., the director of the National Center for Environmental Health/Agency for Toxic Substances and Disease Registry at the U.S. Centers for Disease Control and Prevention, has found evidence that healthy adults who partake in wilderness experiences such as hiking, fishing, and camping make healthier lifestyle choices. Similar activities are often used to relieve psychological disorders and developmental disabilities. Other studies show that those who exercise outside where there are trees and grass are often less stressed and depressed than those who exercise inside a gym. It would appear that spending time outside is beneficial to everyone.



Nature harbors breathtaking beauty for all to enjoy. Klamath National Wildlife Refuge in California.
FWS image

In response to the rising evidence which shows how many health benefits the outdoors provides, The U.S. Fish and Wildlife Service has launched a campaign to get kids outdoors and have fun. Check out the Children and Nature website at <http://www.fws.gov/children/index> for more information. The California Roundtable on Recreation, Parks and Tourism has also developed the California Children's Outdoor Bill of Rights. The Children's Outdoor Bill of Rights list 10 activities that each child should have the opportunity to experience before entering high school. These rights were endorsed by Governor Arnold Schwarzenegger in 2007. Log on to <http://calroundtable.org/cobor.htm> to see this list. And, as always, you are invited to join us for one of the weekend activities listed in Tideline.

So what are you waiting for? Let's go outside!

Other links:

<http://www.cincbayarea.org/>

<http://www.cnaturenet.org>

<http://www.childrensnatureinstitute.org/>

<http://www.greenhour.org/>

<http://www.nochildleftinside.org/>

By Carmen Leong-Minch, San Francisco Bay NWRC

Toe River Valley Festival

The inaugural Toe River Valley Festival, held over two days in late May, gave every fourth grade student in North Carolina's Yancey County an opportunity to go on a nature hike, hold a mayfly, and race against other students to make a compost pile.

For most, collecting insects from North Carolina's South Toe River was the first time the students had seen a mayfly, or stonefly, or learned that dragonflies spend their early lives under water.

All of Yancey County sits within the Toe River watershed, home to one of the most important remaining populations of the endangered Appalachian elktoe, making it a priority area for the U.S. Fish and Wildlife Service's education efforts. The festival was one of a long and continuing series of environmental education events in the watershed that have focused on giving students an opportunity to get their feet wet in the area's rivers.

Although the festival was the product of months of planning on the part of the Service and the local watershed group, Toe River Valley Watch, pulling it off was a community endeavor. Members of the local high school's Eco-Club served as guides and chaperones for the elementary school students. Local farmers led the compost-making competition, while a local artist led the students in painting, and electricity games were led by a local solar power company. A ranger from Mount Mitchell State Park, which sits at the top of the watershed, led the nature hikes and an AmeriCorps volunteer from a neighboring watershed group led the lesson on watershed health.

Plans are currently underway to make the Yancey County festival an annual event, and to start a sister festival in the neighboring county which also sits in the watershed.

By Gary Peoples, USFWS



Participants identify aquatic insects from the South Toe River in North Carolina.

PARENTS

Sense of Wonder Preschool Camp at Parker River National Wildlife Refuge



Campers and their parents investigate a puddle full of toad tadpoles in the dunes.

Rachel Carson once 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." These words served as the inspiration for the second annual "Sense of Wonder" summer camp for children ages three and four and their parents at Parker River National Wildlife Refuge.

As a child, my love of nature came from spending my summers on the Massachusetts coast, not even a couple of miles (as the plover flies) from Parker River National Wildlife Refuge, where I now work. I spent each day of the summer out on the beach, collecting shells, swimming in the cold Atlantic, and keeping a sand pail aquarium filled with starfish, periwinkles, sea urchins, sand dollars, and anything else I could find on a given day. Those days, along with the encouragement of my Mother who never turned away the sand pail critters I brought home, helped form the naturalist and park ranger I am today.

Fast forward to 2009 and you'll see more children playing indoors than out. Computers, video game systems, and parental fears of the outdoors and stranger-danger are keeping kids inside more than ever, where it's "safe." In an effort to reclaim the sense of wonder in today's children, this camp was designed to create a positive outdoor experience for young children and their parents. It was designed to inspire and excite, encouraging parents to make outdoor exploration a priority in their child's life, and help them be their guide for wonder.

[Read More](#)

Hooked on Fishing – Not on Drugs

The Edwin B. Forsythe National Wildlife Refuge and the Township of Galloway, NJ, once again held their annual youth fishing derby, giving kids a lesson in life on the perils of drugs while getting a chance to hook a fish or two.

Over 200 children and their adult fishing partners lined up around Galloway's Patriot Lake - the centerpiece of a public park - which is regularly stocked with perch, bluegills, sunfish and catfish. The annual derby is affiliated with the "Hooked On Fishing - Not On Drugs" program offered through the American Sportfishing Association's Future Fisherman Foundation.

The first derby was held at the refuge in 2003 and attracted about 25 kids. Before long, the growing and popular event outgrew the refuge and was moved to the town lake.

Before the first hook hit the water in the catch-and-release competition, children were required to visit several educational stations. Learning about the dangers of drugs was an important message kids learned at one of the stations, staffed by Galloway police officers and aided by a number of Explorer Scouts. In addition to straight talk and brochures, the physical effects of drugs were brought home by exhibits - one exhibit even included a pickled liver, preserved to show the life-ending damage that addiction can bring. Other stations focused on fishing and environmental conservation, providing information on aquatic ecology, outdoor ethics and the basics of how, when and where to fish. Friends of Forsythe set up a station to promote the refuge, which many people, especially newcomers, were unfamiliar with.

Just before "cast-off," a representative from the Federal Bureau of Prisons Aquaculture Program (at Fairton, NJ) made a timely arrival with a truck full of fish and gave a brief presentation on six species of fish common to ponds in New Jersey. Then, fish were netted out of the tanker and placed in buckets for the children to empty into the lake.

The two-hour fishing period began and ended with a blast from an ambulance siren. Several volunteers were stationed around the lake to help as needed, while others were set up to parcel out bait. During the derby, a fishing organization conducted a casting contest. Younger participants who became impatient or tired of waiting for a fish to bite could take a break and watch minnow races (minnows swam from one end of a rain gutter full of water to the other). In addition, kids had a chance to make fish prints (Gyotaku) on a t-shirt or piece of paper. Some participants were experienced youth anglers, while others attended the derby to learn the basics.

To complete the event, children and their families were treated to lunch. Prizes were given to 1st, 2nd and 3rd place winners in two categories, ages 5 to 8 and ages 9-12, and for the longest fish caught overall. Winners all received plaques and fishing gear. In addition, every child received a door prize and a t-shirt.

Did participating families have a good time? Consider this review from one of the participants: "Thank you for having such a wonderful event. We need more family activities. Living in Atlantic City, our children don't get out into nature enough".



Participants enjoy a variety of entertaining and educational experiences about aquatic resources at the Forsythe Fishing Derby in New Jersey.

A Lesson in Digital Photography for Luddites

Part Three of Three

Every night I downloaded their many photos and made the hard choices to print one or two for each camper. I had hoped to leave all the images with camp coordinators, but due to computer and time issues I instead sent CD's to camp coordinators for distribution last fall. I introduced the National Wildlife Refuge Association youth photo contest to each camp and hoped they would make it their culminating activity. However, they canceled their contest, so an ideal culminating activity has yet to be found.

Tom and Mary and I learned some valuable lessons about working with digital photography and kids in the field during the Pribilof Islands camps – lessons I then took with me to Camp Qungaayux in Unalaska. First, it is vital that the kids go home right after camp with at least one printed photo that they took and, if possible, a CD with all of their photos. Mary printed some of her photos that provided examples of good and not-so-good composition focusing on: framing, horizon, rule of three, perspective, etc. These photos became examples used at every camp for how children of any age can take quality images of the beautiful places they live.

Another important lesson I learned during the workshops was that the campers' photos should be displayed together – for them to discuss and for the larger community to celebrate. On St. Paul Island we displayed photos taken by kids at the community center camp base. In Unalaska, I turned a big sheet of plywood into a display of the photos taken by campers throughout the week for their families and community members to admire during the last potluck of camp. I was fortunate to work with an inspired Unangan language teacher there. She wrote Unangan words to accompany every photo on the display. Thus, it became not only a place to celebrate the photographic work but also a continuing learning tool for cultural diversity. This is the perfect mix of nature and culture that we strive for in these camps.

The Unalaska kids only had nature photography for an hour during the week, which made it a much different class. We covered the basics of composition at the beginning of the hour using Mary's example photos. Then I had the kids choose the route. I also made it clear at the beginning of each photo session that it was up to them to photograph what they found interesting. The kids took me to places at camp that I, and they, had never been. We explored a stretch of beach that is normally out of bounds. The youngest kids (4th graders) wanted to head straight up hill. We ended up in a magical "jungle" of ferns as tall as us with views of camp that astounded. Unalaska campers had no chance to enhance their photos on the computers, but I spent between two and three hours each night downloading and printing. This adds extra time and effort to an already full day for the educator, but their results were gorgeous. And at this camp, the kids write journal entries every day. I was most gratified by one girl's entry, an older girl who has been coming to camp for several years. She wrote that she had never realized that the nature around camp was so pretty until she did the nature photography class. Want to connect kids with nature? Get digital cameras into the hands of the kids and get them outside. They will do the rest.

By Lisa Matlock, Education Specialist, Alaska Maritime National Wildlife Refuge



Camp Qungaayux participant capturing a bald eagle at rest in Unalaska, Alaska.

EDUCATORS

Turn Your Students into Citizen Scientists



Project BudBurst is an online database that can turn a classroom of students into a cohort of citizen scientists. The concept is simple: students choose plants in their backyard, neighborhood, or school grounds, and then record information on the lifecycle events of each plant, called phenophases, throughout the year. There are eight basic phenophases to observe, including: first leaf, all leaves unfolded, first flower, full flower, end of flowering, first ripe fruit, 50% color, and 50% leaf fall (http://www.windows.ucar.edu/citizen_science/budburst/

[participate_phenophases_gp.php?plantGroup=5](http://www.windows.ucar.edu/citizen_science/budburst/participate_phenophases_gp.php?plantGroup=5)). The study of the timing of these lifecycle events is called phenology. Phenological observations have been used for centuries by farmers to maximize crop production, nature-lovers to anticipate the best time to view wildflowers, and by almost all of us to prepare for seasonal allergies. Today, phenological observations are also used by scientists to track how climate change is affecting the lifecycle of plants because plant phenophases are directly affected by temperature, rainfall and day length. Unlike many animals, climate change can have the largest effect on plants because plants cannot move easily from one area to another. As a result, growing seasons could begin earlier, or they could continue over a longer period of time. By tracking changes in the timing of phenological events, scientists are able to better understand how our environment is changing.

Project BudBurst can be adapted for any grade level. For example, older students may identify species on their own using field guides, while younger students may be guided to observe a particular plant species identified by an adult. There are five groups of plants to choose from: Wildflowers and Herbs, Grasses, Deciduous Trees and Shrubs, Evergreen Trees and Shrubs, and Conifers. Project BudBurst has developed an Activity Guide (http://www.windows.ucar.edu/citizen_science/budburst/TeacherGuide_PB2007.pdf) for teachers of grades K-12, which is aligned with both the Benchmarks for Science Literacy (AAAS, 2000), as well as the National Science Learning Standards (1997). New teaching materials and classroom activities (http://www.windows.ucar.edu/citizen_science/budburst/educators.php) are currently in development.

Story by: Lisa Moss, Fish Biologist Mid-Atlantic Panel on Aquatic Invasive Species Coordinator

Messy Materials, Dancing Scarves and a Willow

One little boy balances wooden bricks on a log. Several more youngsters twirl with scarves on an outdoor stage. An older brother clutches a toddler trying to balance on a fallen tree. Children sit on tree stumps, dig in the dirt and make designs with pine cones and shells while others build a miniature dam in a shallow stream.

It's all part of Nature Explore, a program designed by the Arbor Day Foundation and the Dimensions Educational Research Foundation to connect very young children with nature. Sheila McCartan, visitor services manager at Nisqually National Wildlife Refuge in Washington, learned about the concept during a workshop at the National Conservation and Training Center (NCTC) and knew instantly that "it went to the heart of what we need to do and could do on a national wildlife refuge." Now Nisqually Refuge is poised to be the first national wildlife refuge with a Nature Explore classroom. The Washington Conservation Corps is expected to begin installing plants and structures this fall.

The Nature Explore space offers a variety of outdoor activities that help youngsters from infancy through kindergarten develop cognitive and physical skills as well as a familiarity with nature. Areas within the space are connected and divided with trails and paths, willow fences and fallen logs. There are multiple activity areas – building, music and movement, climbing, nature art, greenhouse, construction, gathering and messy materials. Each Nature Explore classroom is customized for the interests and setting of a particular refuge, park or school. The Los Angeles public school district has signed up for 100 Nature Explore classrooms.

Making It Happen

Nisqually Refuge's Nature Explore classroom will fill 10,000 square feet next to the environmental education center, now under construction. The Dimensions Foundation created a concept plan and provided training in designing and operating the classroom for 40 people at Nisqually Refuge, including staff, volunteers, partners and local day care providers.

The refuge received a \$28,000 Challenge Cost Share grant, matched with dollars and in-kind contributions by the Friends of Nisqually. NCTC, in Shepherdstown, WV which was seeking a west coast model to complement the Nature Explore elements being added to its own day care center, provided Nisqually Refuge with one-time grant of \$5,000 for blocks and other supplies. The NCTC site now has a greenhouse where children grow their own vegetables, logs that replace a plastic climbing gym and a sunflower maze.

McCartan bubbles with excitement. "We can now use this to reach a new audience." She envisions a Saturday morning Family Club with planned activities as well as a new place for preschool and day care center field trips. It will be open year round and will be a work in progress as families and staff learn new ways to use the space, which is also located in an orchard.

"So what do we do when we have falling fruit?" wonders McCartan. "Using different senses, kids could smell the fruit, examine the fruit for bugs, or draw the decaying fruit. Maybe kids would even see deer or birds eating the fruit."

Learn more at www.arbordayfarm.org/ and www.dimensionsfoundation.org/.

Check out the new Arbor Day Foundation video

By Karen Leggett, USFWS



Children taking part in Nature Explore program

Connection: What It's All About

As a representative on the U.S. Fish and Wildlife Service Connecting People With Nature Pacific Region Team, I'm always looking for ideas and activities that get people outside, appreciating the nature around them. One day in my office in Olympia, WA, I heard about students from Lincoln Elementary school working on understanding their environment and having a "sense of place" for the 2008/09 school year.

I knew of Lincoln's reputation for outstanding alternative education, but I had never experienced it firsthand. At Lincoln they teach the Options Program, a program founded on the belief that curiosity and creativity are innate in all children and that learning should nurture a sense of caring for other people and the environment. Talking with teachers and students, I saw the remarkable personal connection students had with this "place," and the genuine care and dedication they poured into their work. There were felt wool sculptures of endangered species, bird houses from gourds grown in the school's organic garden, written poems inspired by the students' observations at the school's on-site wetland, and an interactive game that lit up when students correctly matched habitat questions to answers on a student-made map. One student had his letter to the editor on a downtown artesian well issue published in the daily newspaper.

I was impressed. How had this school managed to turn one year's study into so much awareness and action? I spoke to one of the teachers, Michi Thacker to see what I could find out. She said, "We worked to get the students engaged, invested and passionate" about their home and its ecology by getting them directly involved with their senses first. Then we addressed the issues by asking them the following questions: Why is this place special to you? What do you feel here? See? Hear?" She continued, "To open up environmental topics (like climate change), without scaring them, we wanted to lead them toward a sense of their own empowerment. That creates awareness and encourages action."

A few days later Emily Arya, a student at the school, sent me an email with a photo explaining that "...My friend Arya Kern got my attention because she was asking parents and other students to help peregrine falcons...I told her that I would share this picture with you to help spread the word that peregrine falcons still need our help.

Arya's plea for the peregrine was action born from her awareness. It made me think: Couldn't we all take some wisdom from Lincoln? Couldn't we learn something about the ecology of our communities by listening more to the earth more, watching for special animals in our own backyards, opening our minds to the possibilities of connection to the world around us and our embracing the opportunity to change what we can?

Arya and her fellow students showed me that by being aware and responsive to our places, a sense of connection and empowerment grows. When the young man whose letter to the editor was published was asked if he really thought he could make a difference, he answered: "Absolutely!"

Now, I ask, what would our places be without them? From the spring water bubbling out of the artesian well in a downtown Olympia parking lot to the Makah Indian Tribe reservation off Cape Flattery, their awareness matters. It's connected.

By Taylor Pittman, Information and Education Specialist, Washington Fish and Wildlife Office



Arya Kern, student at Lincoln Elementary School, Olympia, WA would appreciate any suggestions for how she might further help conservation efforts related to peregrines.
FWS photo