

directions

Journal of the Association of Nature Center Administrators

Answers to Access: Ideas for Increasing Participation by Under-served Groups in Community Science and Nature Programs

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The environment, perhaps more now than at any time in recent history, is at a forefront of the public's mind. However, there is also an increasing trend that people, particularly children, are spending less time outside, which is a concern that has garnered considerable momentum by author Richard Louv's *Last Child in the Woods*.

Since experiences in nature are critical to facilitating a child's connection with the environment and a commitment to stewardship later in life, the trend is of great concern.

Nature centers and other community science facilities, such as the Colorado State University Environmental Learning Center (ELC), have

sought to help create this connection but face challenges.

One of the challenges includes growing diversity in the United States, which presents a challenge for how nature centers can insure they are accessible to traditionally under-served groups.

Latinos are, according to the Census Bureau (2006), the largest minority group in the United States and currently comprise approximately 15% of the overall population, and the focus of a recent research study at the ELC.



photo courtesy of the Environmental Learning Center

The mission of the Environmental Learning Center at Colorado State University is to connect people with nature by facilitating educational, inclusive, and safe experiences in the natural environment and to advance the field of environmental education through sound research and practice.

Our goal was to identify what factors influence family choice – particularly Latino families – to participate

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photo by Ken Voorhis

Director's Notes

Jen Levy
Executive Director
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I can't believe it's been a year since I started with ANCA! As with any new job, much of my time has been spent learning about the organization and the programs that are in place. One of ANCA's greatest services is the Peer Consult program.

Peer Consults, which debuted in 1992, provide a unique service to the nature center profession. After reviewing a client center's issues and needs, a team of experienced ANCA members is assembled to visit the center and provide input and guidance. After the team leaves, the center receives a written report summarizing the Consult and gains a network of new peers for follow-up questions.

This has been a banner year for Consults with eleven scheduled and several more in the planning phase. Consult teams have traveled to Alaska, Michigan, Texas, Connecticut, and locales in between. Teams of executive directors and education directors have been assembled to work with organizations on issues ranging from how to start a nature center to reviewing educational programs to "greening" facilities to strategic planning readiness. And the feedback we have received has been incredibly positive.

After participating in a "Community Leader's Breakfast" during a recent consult, one individual sent the following note, "I was impressed with the depth of knowledge, experience, and enthusiasm of those I spoke with. I anticipate your efforts will enhance our programs and ensure the preservation and future of our valuable resources. I look forward to their report, comments, and recommendations."


A director at another center wrote to say, "The ANCA Consult final



report has been the basis for two strategic planning sessions with a group of board members and general supporters. We have made some major program changes for our 08/09 school-based program and raised our fees significantly – a suggestion from the consult. We simply had to do something and the ANCA consult gave us the confidence to do what we should have done four years ago! The consult was worth every penny!"

In addition to the centers we serve, Consult team members benefit as well. One team member wrote, "Being part of an ANCA Consult has been a wonderful experience! I learned as much as the people we served." Please consider submitting your name as a potential team member by filling out the Skills Survey found on the ANCA website "Member's Only" page. Serving on an ANCA Consult is a unique opportunity to work with your peers from around the country while serving a center in need.

New last year, the ANCA Peer Consult Scholarship program awarded Consult scholarships to the Salem Audubon Society in Oregon and to the Clinton Community Nature Center in Mississippi. We will offer scholarships again during 2008-2009. Be sure to look for information after The Teton Summit in August.

And speaking of the Summit, I hope to see you in Jackson Hole in August! 

New Partnership

ANCA and Whisper in the Woods Team Up

As part of ANCA's marketing initiative, we have partnered with *Whisper in the Woods Nature Journal* and enjoyNature.org to offer our member organizations an additional benefit to share with their members and friends. This project provides three marketing tools to help promote community nature centers across the nation.

The launch of the project has been pending funding through procurement of a sponsor. Well, good news! We have an interested sponsor: Neuton, manufacturer of electric battery-operated lawn mowers. The company offers a unique opportunity to lead a green initiative in your community as well as sponsorship of *Whisper in the Woods* and enjoyNature.org.

The three components of this project are:

1. Host a Gas Lawn Mower Exchange Event and Neuton will offer coupon vouchers for you to give in exchange for old lawn mowers. These vouchers will be good for significant discounts on the purchase of a new Neuton battery-operated lawn mower.

2. *Whisper in the Woods* Subscription Benefits Program: This partnership gives individual nature centers the ability to provide a high quality nature publication that would be too expensive for one nature center to produce individually.

3. enjoyNature.org: This web site is already up and running, although with the sponsor support we will be able to make significant additions.

Its primary purpose is to offer each nature organization's membership and the general public an interactive web site designed to offer information for planning eco-vacations, finding nature-based events, and researching green products and services.

To move forward with the project, we need to have an accurate measurement of ANCA members' involvement. Will you host a Lawn Mower Exchange Event in the Spring of 2009? Do you want to take advantage of the *Whisper in the Woods* subscription benefit program and how many subscriptions will you be ordering? Will you use the free E-newsletter program which includes sending the ANCA/enjoyNature E-zine to your members? If not, will you forward the enjoyNature E-zine to your mem-




ANCA membership participation is needed to create a beneficial partnership with Whisper in the Woods and Neuton. Let us hear from you!

bership?

Let us know how many members you represent and an email address for the person at your organization who will be our contact. Please confirm as soon as possible. Email Kimberli Bindschatel directly at kim@whisperinthewoods.com with your questions and input.

You can review the details of the project at www.natctr.org.

Let's take ANCA's marketing initiative to the next level! 



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in nature center or other community science programs.

In the Spring of 2006 we began conducting focus groups with parents of elementary school students in Fort Collins and Pueblo, Colorado. We conducted 10 one hour focus groups with a total of 72 parent participants, some of which were Spanish-speaking only focus groups and parents who traditionally have not attended nature centers with their children. We asked the parents questions about their interest in such programs and facilities for their family, and what may prevent or enhance the likelihood of their participation.

The results from the focus groups were very encouraging. In particular, nearly 100% of all participants expressed interest in community science programs. This should provide hope and ambition to nature centers; a lack of interest was clearly not a barrier to participation by any group, including Latinos.

The interest exists among families; the challenge is overcoming other barriers that are often practical matters.

Many barriers to participation were identified by both Latino and non-Latino parents; some of their barriers were similar and many were different.

The most frequently cited barrier for non-Latino focus group participants was time. Parents felt that they did not have the time to have their children participate in such programs because of their busy work sched-

ule and other commitments of their families and children (e.g., sports leagues). This barrier poses a challenge to nature center staff; we must convince parents that nature centers and less-structured time outdoors are of comparable value to their families. For many parents, it must be elevated



photo courtesy of the Environmental Learning Center

The ELC is situated on 212 acres of land located approximately three miles east of the main campus of Colorado State University in Fort Collins, CO, on the banks of the Poudre River at the end of the Poudre River Trail. It is managed through CSU's College of Natural Resources, with the staff comprised of mostly CSU students.

as a priority, in the same tier as other activities in which their families participate.

Aside from time, no other barrier was mentioned frequently by the non-Latino parents in the focus groups. The barriers identified most often by Latinos were lack of awareness about programs, cost, lack of programs and program information in Spanish and concerns about safety of their children. In fact, lack of awareness about programs was the most frequently cited reason that parents expressed for not participating in programs offered by facilities such as nature centers.

Despite the high level of interest in such programs in general, few

parents expressed familiarity with local resources. Such a finding can be frustrating to address; nature center staff might react with "What more can we do!?" Our current efforts seem to be exhaustive and comprehensive, but we must ask if those efforts reach a broad audience and

include the methods of communication that are most often utilized by diverse groups (e.g., word of mouth, networks).

Most of the Spanish-speaking focus group participants expressed that they wished that information would be provided in Spanish. When they receive information in English and which they did not understand, they expressed feeling uncomfortable contacting the organization for more information or asking someone else to do so on their behalf.

If a nature center wants to increase participation of Spanish-speaking community members they must consider hiring

bilingual staff or partnering with another organization that can provide those services.

After ensuring proper marketing and advertising, we must also evaluate what our organizations can do to alleviate the financial burden that may be keeping some families away. It could be as simple as offering a free program a few times each year or scholarships for summer camps. This is often easier-said-than-done; the funding has to come from somewhere to provide such programs.

The barrier of safety for Latino parents was clearly a paramount issue. A majority of Latino participants made numerous comments that sug-

gested a need to become familiar with an organization and its staff to gain a sense of ease about the well-being of their child if left in the care of the organization. Many Latino parents wanted to attend the programs with their children, in part to insure their safety but also to promote family togetherness and to learn the science content with their child. In this regard, family-level programming is a necessity. In addition, this allows parents to converse about the content and answer questions later at home.

Many of the results that the ELC learned from this research can be addressed easily and swiftly to develop programs that are more inclusive of Latinos, depending on the resources of the nature center. We have integrated much of what we learned already, and will continue to develop methods for increasing Latino and non-Latino participation. Below are some strategies that have worked for our organization:

• **Teacher in-service days:** One particular success at the ELC has been offering all-day programs during in-service, planning and parent-teacher conference days at the local school district. Working parents often have to come up with a child care plan for those days; a nature-based program that follows the work day has been one of our most regularly well-attended program options, and helps address the barrier of time. Parents do not need to find more hours in a week for their child to participate; they are simply finding a substitute for the time that was otherwise scheduled for school.

• **Partnerships:** Engaging the Latino community more successfully in our efforts has been the product of relationships with Latino-serving organizations that have credibility and trust with their community. These organizations have helped spread the word out about our programs,

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provided opportunities for us to make presentations – in Spanish – to their parent groups, and advised us on how to best develop and market programs for Latino audiences. These partnerships have been critical to our organization’s goal to become more inclusive.

• **Family Programs:** As stated above, many Latino parents are interested in programs in which the whole family can attend. While planning programs that cater to adults and children with different abilities and learning styles can be difficult, it is certainly not impossible and it is necessary for attracting many families to begin with.

• **Bilingual Staff:** The ELC has been fortunate for the past few years to have staff members who are bilingual. This has been a necessary advantage in helping to lead Latino families at our programs. In addition, our Spanish-speaking staff members have translated our program infor-



photo courtesy of the Environmental Learning Center

The Environmental Learning Center conducts and hosts many research projects affiliated with Colorado State University. From evaluating the effectiveness of experiential learning to studying the song patterns of chickadees, research at the ELC supports the endeavors of undergraduates, graduates, and faculty.

mation so more Spanish-speaking parents can be aware of what we do. However, we must recognize that simply speaking Spanish does not equate to understanding a culture; we have been deliberate in our efforts to offer programs that are culturally appropriate and appealing.

• **Free programs and scholarships:** Our family programs are free and we also have scholarships available to eligible families in our community for our youth programs and summer camps. Our diversity and outreach efforts are published as a development priority; we raise and allocate donations earmarked for extending opportunities to those who might not otherwise be able to afford the participation fees.

These are just a few examples of ideas that the ELC has tried to incorporate in our programs to increase participation of Latino families. It is worth noting that our research was done with Latinos of primarily Mexi-

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can decent, so our results may not be generalized to Latinos of different cultures or to communities outside of our study area.

It is our hope that other nature centers and community science programs can learn from and build on our results to make their programs more accessible to under-served groups. We, as organizations who offer science and nature programs are faced with a great challenge, to provide children with a connection to nature, all children. 

Brett L. Bruyere is an assistant professor at Colorado State University in the Human Dimensions of Natural Resources department and the director of the CSU Environmental Learning Center. At CSU he is responsible for teaching upper-division and graduate level coursework in protected area management, environmental communication,

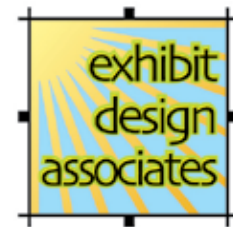


photo courtesy of the Environmental Learning Center

A turning point for the ELC came in 1989, when CSU students passed a referendum to increase their fees to provide an operating budget for the Center. This enabled volunteers and professionals to heighten the environmental education experience at the Center. An affiliation with Poudre School District was soon initiated and hands-on nature education quickly flourished. Today, the ELC serves school kids, scout troops, the CSU community and many others with educational programs throughout the year.

and research methods. At the ELC he provides leadership, oversight, and supervision of all facets for the 212-acre nature center, including supervision of 15 staff, management of multiple budgets, administration of day-to-day activities and overall quality assurance for environmental education programs.

Lori O'Day has been a program staff member at the CSU Environmental Learning Center for the past two years. Her primary responsibility has been to create partnerships and design programs that help the ELC serve more diverse audiences. Lori graduated from Colorado State University in December of 2007 with a M.S. in Human Dimensions of Natural Resources. Her thesis research involved developing a framework for informal science education participation, with a focus on Latino families.



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Profiles:

ANCA Leadership Award 2008

Congratulations to Jack Shea, Teton Science Schools

Dick Touvell
Executive Director
Chippewa Nature Center
Midland, MI

On August 21 during the Annual ANCA Summit, Jack Shea will receive the 2008 ANCA Nature Center Leadership Award, bestowed appropriately on his own home turf at the Teton Science Schools in Jackson Hole, Wyoming (the site of this year's Summit). This annual Nature Center Leadership Award is the highest honor bestowed in this country upon an individual in the nature and environmental learning center profession.

The purpose of the award is to recognize individuals who have:

- Made a major contribution to the success of a nature center (or centers).
- Made important contributions to their field through professional organizations.
- Supported and mentored other nature center leaders.

Jack Shea is well deserving of this prestigious award. He is an extraordinary leader in education and the nature center profession. Throughout his career, Jack has demonstrated superlative leadership skills through his work as Executive Director of Teton Science Schools since 1988 and as a former classroom high school teacher, college faculty member, and outdoor leader of regional and international trips.

In addition to leading the phenomenal growth of the Teton Science

Schools over the years, he has owned and directed his own outdoor program business and has traveled extensively through North America, Italy, Ireland, and East and West Africa. Jack's education includes a B.S. in Wildlife/Forest Management from the



photo by Jim Winn Photography

Jack Shea, Executive Director of Teton Science Schools, is the recipient of ANCA's 2008 Nature Center Leadership Award.

University of Vermont and an M.S. in Wildlife Biology from the University of Alaska.

Jack has inspired many people, including colleague Wayne Turner, former Director of Advancement for Teton Science Schools. Says Wayne, "Jack's work is best reflected in the thousands of people - students, colleagues and staff - that he has influenced throughout his career. Jack has excelled in the areas of team-building, fundraising, financial management, strategic planning, communication, and above all else, leadership." According to Wayne, Jack's example to those around him is clear. "Everything is possible, hard

work and honest intentions carry the day, surrounding yourself with good people will move mountains, dreams always cost more than the budget, so grow the budget, good people sometimes fail and that these are learning opportunities."

John Gallagher, Director of Education at Stokes Nature Center said, "I think Jack's greatest contribution to the nature center profession has been implementing and sustaining a program that continually turns out leaders in the Environmental Education field. Graduates have successfully pursued careers as, educators and administrators in museums, science centers and nature centers, naturalists for government agencies, instructors in experiential outdoor programs, and some have even founded their own programs. Jack's program has also inspired into existence similar graduate programs that in turn are producing more leaders."

Jack is inclined to describe himself as a benevolent dictator but, says ANCA Executive Director Jen Levy, "If that is true, perhaps the world needs more benevolent dictators."

Clarke Nelson, Chair of the TSS Board of Directors says, "Jack has done an excellent job in leading the expansion of the Teton Science Schools. TSS's budget has quadrupled in the last eight years and has added over 800 acres to the campus at the Journeys School with all new classrooms and facilities.

"The Conservation Research

(continued on page 10)

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Center has new facilities and has expanded its outreach to many new civic and business interests in Wyoming providing ecological, environmental research, and consulting. TSS has expanded its educational outreach to a national and international level and reaches thousands of students each year.

“The Graduate Program continues to produce outstanding students, most who go on to get their master’s degree and employment in nature related organizations. Wildlife Expeditions has increased their eco-tour revenue by fivefold since 2002.

“Due to Jack’s leadership, Teton Science Schools’ reputation has achieved new high levels and is recognized nationally and internationally as a leader in nature/environmental education and research.”

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Book Review

Schoolyard-Enhanced Learning Using the Outdoors as an Instructional Tool, K-8

Gordon Maupin
Executive Director
The Wilderness Center
Wilmot, OH

First my disclaimer: Herb Broda has been my friend and mentor for more than 26 years. He serves on my Board of Directors and has been a valuable addition to The Wilderness Center's leadership for even longer than the years I have known him.

Next: I need to tell you what this book ISN'T. Herb holds a Ph.D in Education. This book is NOT the typical dense treatise of educationese whereby inherently simple concepts are buried under layers of complexity and jargon until they become incomprehensibly complex.

Now: Here is what the book IS. It is a PRACTICAL step-by-step guide to encourage classroom K-8 teachers to take the children outdoors. It is designed to take away the teachers' fear. It encourages teachers to step off the path of least resistance and into the real world where the sun shines, birds sing, insects crawl, and flowers bloom.

The practicality of this book stems from Herb's life. While he is currently a college professor of curriculum and instruction, this position is the end point of a long career in real world education. Herb began as a sixth grade teacher. He continued his education and advanced through the education bureaucracy to become an

assistant superintendent for curriculum and instruction. Upon retirement, Ashland University snapped him up to enhance their education faculty.

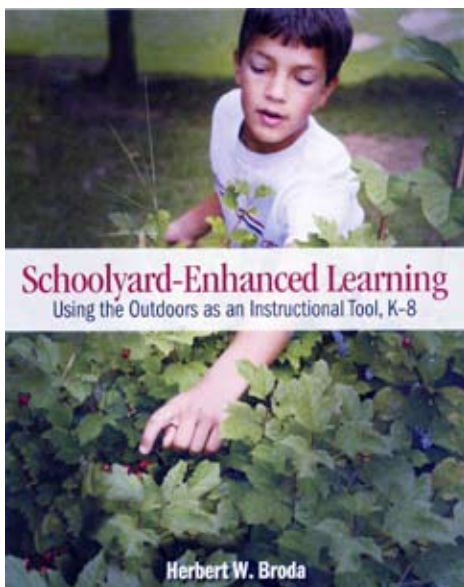
Throughout his career he was a leader in the Environment Education Council of Ohio (EECO). He is practical because he knows what it is

to face pupils every day. He knows what a teacher must say to a principal to obtain the blessing for taking children outdoors. He knows how a principal may view out of the ordinary requests. He knows how fellow faculty may negatively view instruction outside the

walls of the school. This book shares that wisdom.


The wisdom is found in chapters on: Making the School Grounds an Outdoor Classroom, Taking Your Class Outside: The Nuts and Bolts, Developing Process Skill in an Engaging Environment, Teaching Content-Area Concepts Outdoors, and Beyond the Schoolyard.

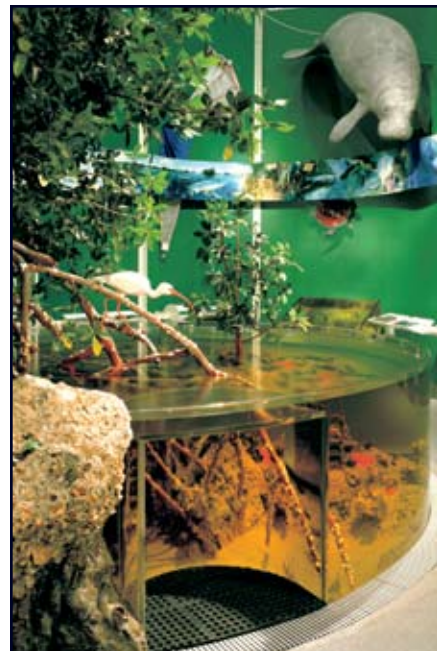
This book can be useful to nature center education staff. From time-to-time we are all challenged with questions and challenges this book can address. When a school asks a nature center to assist with creating an outdoor learning area, this book can be a valuable PRACTICAL reference. When a school administrator needs encouragement and justification for outdoor learning, this book can pro-



vide PRACTICAL support.

In summation, give serious consideration to adding this book to the nature center library used by your education staff and volunteers.

The book is published by Stenhouse Publishers. 



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From The Field:

Ferry Beach Ecology School: Where Students Learn the ABCs of Ecology

Jaime Duval
Assistant Director
Ferry Beach Ecology School
Saco, ME

It is a sunny May afternoon on Saco Bay, and 160 fifth-grade students from Ipswich, MA have just arrived at Ferry Beach Ecology School (FBES) in Saco, Maine. They have moved into their dorm rooms, eaten a wholesome, family style lunch, and are now ready for their first lesson. As they sit in a clearing behind the sand dunes, they attentively watch four FBES naturalists dressed up as a cloud, a tree, a squirrel, and bacteria. The kids giggle as they watch their new teachers for the week perform an improvised skit about Abiotic and Biotic characters experiencing Cycles and Changes.

The Ipswich students – and 2,500 other students who will visit the FBES campus during the spring term – are getting their first taste of how to use the ABCs of Ecology® to read the landscape of the world in which they live. For one week, the students get to live on the Ferry Beach campus and study ecology and sustainability in more than eight ecosystem including the nearby beach, dunes, salt marsh, tide pools, forest, ponds, tupelo swamp and Saco River.

When the skit is over, the FBES naturalists take a bow, remove their

costumes, and begin reviewing with the students the “Abiotic, Biotic, Cycle, and Change” factors the students will see during their afternoon lesson. The skit, also known as a “preview,” is an important part of the creative, narrative teaching style at FBES and



photo by Maggie Daigle

Improvisation: Ferry Beach Ecology School (FBES) Naturalists Lindsay Arbuckle and Mike Dufilho, dressed as Igor and Dr. Evil improvise a skit about the ingredients for creating soil prior to a geology lesson. The “preview skit” is part of the creative, narrative teaching style used at the Saco, Maine, school to hold students’ interest and help them retain key concepts.

serves to peak students’ interest and help them remember key concepts.

“Learning and having fun is such a perfect combination,” says FBES Executive Director and founder, Drew Dumsch. “I’ve seen too many outdoor lessons that were a boring ‘drag & brag’ listing of facts when really, the teaching of ecology can be so colorful and imaginative! When we make

the lessons fun with songs and skits, we find that students more easily tap into the magic and mystery of their surroundings. And when our staff is having fun and is excited about the ecosystems they’re teaching, it really comes through to the kids, helping them to focus their interest while retaining and understanding information.”

During their week-long stay, study groups of ten students and their FBES naturalist take part in three field ecology based lessons a day with lots of hands-on activities. For instance, they will measure the diversity of an ecosystem and figure out what adaptations a creature needs to survive on the beach. They will be challenged with ecological quiz games, keep their own field notebook, and brave the outdoors – even if it rains or snows! They will listen for nocturnal wildlife and predict the weather. The students

learn about the interconnectedness of the creatures, plants, and each ecosystem they visit. They ponder how they themselves are also connected to this complex web of life.

Since 1999, FBES has worked with upper elementary and middle schools from across New England as well as environmental centers, aquariums, and other organizations

looking for experiential learning at an exceptional ocean site. The number of ecosystems within walking distance of the 36-acre campus allows for each visiting group to experience a wide variety of learning opportunities. For every visit, the lessons are tailored to each school's curriculum needs, whether they are based on a particular class unit or even a particular state's learning results requirement.

And the learning doesn't stop with the daily lessons.

"I have attended FBES as a parent chaperone twice now with the Lebanon Elementary School," says Tim Doane. "I came last year when my older daughter's 5th grade class attended an overnight program and again this year when my younger daughter attended with her 5th grade class for a four-day residential program. FBES is an all-around program. There is not time while the students are there that they aren't learning. It's almost like they are learning 24-hours-a-day. The staff has an amazing ability to engage the students."

The FBES philosophy that teachable moments exist everywhere also extends into the dining room with its Food for Thought program. Students eat and learn together during the wholesome family-style meals. Students are taught about the energy it takes to get food to their plates. Food waste is weighed and by the end of the week the students have worked together to cut their food waste by 75 percent or more. Fruit and vegetable scraps are naturally composted for the Ferry Beach teaching garden.

The Food for Thought program also uses compost bins as examples of decomposition and nutrient cycles and a teaching garden is used to emphasize the interactions between producers, consumers, and decomposers. Every visit to the Ferry Beach organic garden during the growing season includes a sampling of the fruits and vegetables that are going

through their life cycle there. Pulling a carrot out of the ground and taking a bite can have a very big impact on a student's understanding of where food comes from and the energy required to produce it.

"Our overall mission is to teach the science of ecology and practice of sustainability in memorable and entertaining ways," says Dumsch. "By teaching kids and adults in a residential setting, they're able to live the ecology they're learning and really figure how everything in their world is interrelated. With this type of experience, we know they are more likely to become better stewards of the planet."

Ferry Beach Ecology School is operated by Ecology Education, Inc., an educational nonprofit teaching the science and practice of ecology through experiential programs and publications. Since 1998, FBES has brought quality ecology education programs to over 60,000 children and adults throughout New England.

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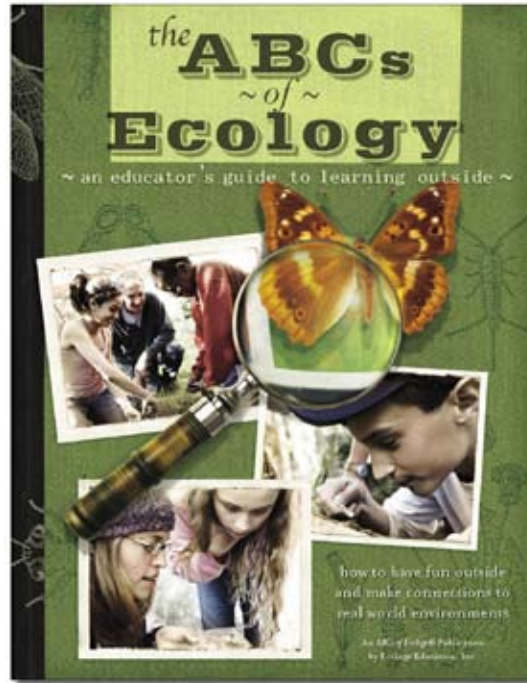
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tial programs, field trips, school outreach programs, teacher training workshops, publishing curriculums and field guides – accentuates the magic, mystery, and wonder of nature so that people can better understand, appreciate, and care for the environment.

How a Book was Born

Often after a week of study with their students, classroom teachers departed Ferry Beach Ecology School wishing they had an easy-to-use resource to continue the excitement for science and learning that the program in Saco, Maine, had started. As a small educational nonprofit with limited funds, time, and resources, FBES had a challenging time figuring out how to create a curriculum guide for educators, or reach a wider audience beyond the schools participating in the residential programs.



ABCs of Ecology: An Educator's Guide to Learning Outside: The 230-page illustrated teaching curriculum published by Ferry Beach Ecology School has become an important resource for teachers, home school educators, and nature center naturalists across the country.

Originally the FBES team intended to compile a few activity descriptions, put together worksheets, three-hole punch the copies, and put them in a three-ring binder for teachers. However, once the FBES Directors started this project they were overflowing with new ideas. They wanted to include important background ecology information, multiple lesson plans, and how to make creative teaching methods come alive

With the help of several grants, the scope of the project grew far larger than any one had expected. Educators from Michigan to Maine field-tested a draft version and a gifted non-formal science educator with an incredible amount of both camp and classroom experience offered a professional critique.

The 230-page illustrated *ABCs of Ecology: An Educator's Guide to Learning Outside* has come a

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long way from the initial 3-ring binder hand-out that was first envisioned. It includes chapters and background info on Geology, Climate, Forest, ABCs of Ecology and Watersheds, and interdisciplinary approaches to link curriculum areas together. Lessons are geared for 3rd - 8th grade levels, with some appropriate for younger and older grade levels.

Since its publication in August 2006, it is now being used across the country and has become an important resource for teachers, home school educators, and nature center naturalists committed to teaching children about the world in which they live.

Because the book's content was gleaned and field-tested from the first-hand experiences of the FBES naturalists over eight years, the guide provides educators with



Forest Discovery: A 4th grader takes a closer look at the structure of a leaf during a forest lesson at Ferry Beach Ecology School in Saco, Maine.

easy access to hands-on outdoor lessons, innovative activities, and copy-ready worksheets. 

ABCs of Ecology: An Educator's Guide to Learning Outside is available for \$24.95 and can be purchased through the FBES web site at www.fbcs.org.

Jaime Duval has been following her dreams since receiving a degree in Human Ecology from the College of the Atlantic in Bar Harbor, ME and a Masters in Environmental Studies from Antioch University New England. Her experiences range from whale research to sailing tall ships to teaching, but what she really loves to do is dig in the dirt. She can often be found on a sunny day in the Ferry Beach organic garden.

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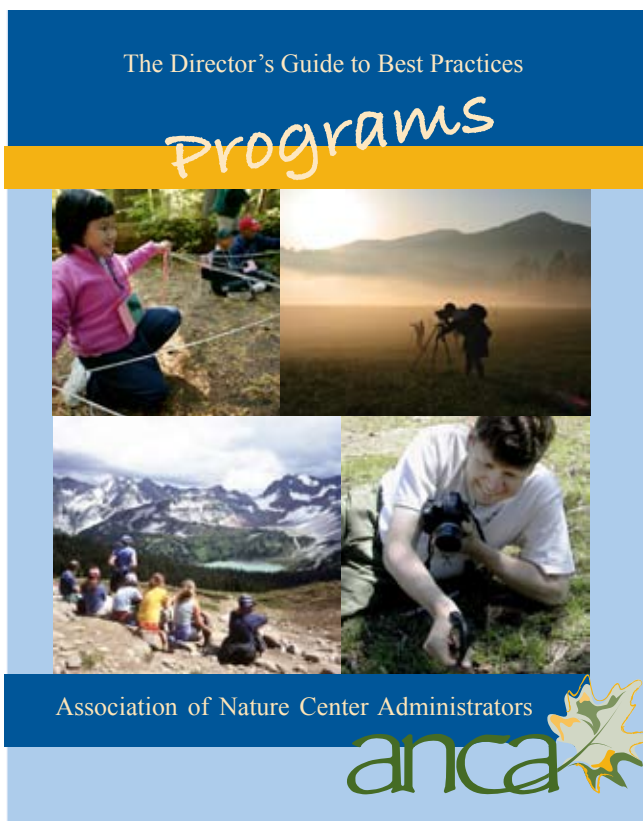
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