

The Newsletter of The Environmental

Education Association of New Mexico (EEANM)



Vol. 10, No. 3: Fall 2002

- Bosque Ecosystem Monitoring Program
- 2. EEANM news
- 7. Student Ecology Research Program
- 8. EE Certification Report
- 10. The Boston TEE Conference
- 11. Water Festival and **Aquarium Exhibits**
- 12. Dolphins at the DynaTheater
- 13. New Mexico State Land Office
- 14. WERC
- 15. Materials and Opportunities
- 18. EE Connections
- 20. Membership Application



We work for education.



The Bosque Ecosystem Monitoring Program

Contributed by Mary Steuver

It is the first day of a fall semester course and the students are gathered around a tan felt blanket laying on the classroom floor in the university biology building. One of four instructors has just asked them to take off their shoes and stick them under the blanket to create mountains and form a valley. Soon the students are walking all over the blanket in stocking feet, laying out strips of blue cloth to represent a meandering and braided river. Then, they place paper cottonwood trees, marshes, grassland and shrubs along the river to learn—in a hands on way—how the changes experienced by the river today differ radically from the 100,000 years of change that the river has already experienced.

This three-semester-hour class is unlike any other course these graduate and upper-division college students have ever taken. In the next sixteen weeks, these students will participate in a wide variety of activities. They will spend days in the field collecting long-term ecological data for an on-going monitoring project, often assisting younger students from second grade to high school with the task. They will learn about the bosque—or riparian gallery forest—along the Middle Rio Grande through lectures, discussions, and guest speakers. They will visit the younger students' classrooms to assist with labs for data processing or other environmental education opportunities. They will read and write about many scientific papers in biology and environmental education. They will keep field notebooks and be responsible for data sheets. They will assist with program management that might include grant writing, presentation making, equipment maintenance, or data collecting and processing. By the end of the semester, they will look back on the experience with a sense of awe and accomplishment. A student or two might even enroll in the same class for the next semester because "there is just so much more to learn..."

This fall marks the twelfth semester of the BEMP Intern Course. A few semesters back, the University of New Mexico recognized the course with its own course numbers (BIOL 408L/508L) awarding the class a stamp of approval and permanence within the Biology Department. Although often dominated by biology majors, the class is a favorite among education majors as well, especially students from the university's environmental education program. Any student, or anybody, is welcome, and often the class attracts working professionals including natural resource managers, teachers, and environmental educators.

For the biology students, often the biggest challenge is learning to

(Continued on page 6)

EEANM_{NEWS}

Winter Newsletter Deadline: January 1, 2003

The EE Connections Winter Newsletter will go out in February, 2003. The deadline for articles and information is January 1. Please submit long or short articles about environmental education and other closely related topics. In addition, information about materials and opportunities is welcome. Please send your contributions to Stephanie Dobbie at the e-mail address below. If you send an attachment, it should be a Microsoft Word document *without* any special formatting. Call Stephanie at (505) 256-4343 with any questions or special requests.

Send newsletter contributions to: stephaniestansbury@earthlink.net

Resource Guide Listings Needed

EEANM needs your help in compiling a statewide resource guide. This guide will connect New Mexican's interested in Environmental Education throughout the state. If you are interested in listing yourself or your organization please contact Dana Vackar Strang at dvackar@slo.state.nm.us or New Mexico State Land Office, P.O. Box 1148, Santa Fe, NM 87504-1148.

Message from the President

As your new President, I want to thank all of you who attended the EEANM 2002 Conference at Ghost Ranch. We had fabulous presenters. Our featured speaker, William duBuys, was outstanding. Special thanks to Ed and Sil Pembleton, Leopold Education Project, for joining us from St. Paul, MN; the "Be Bear Aware" Team of Gail Tunberg and Leon Fisher; and Frannie Miller and Sana Echols for the Noxious Weed Review. Cassie Benson did a GREAT job coordinating this event.

Congratulations to Mary Stuever, our new President-Elect, Dr. Deb Thrall, Treaurer, Dana Vackar-Strang, Secretary, and new Members-at-Large, Bonnie Dils, Peg Sorensen, Jean Szymanski, and Cheri Vogel.

EEANM seeks to build partnerships. If you know of an organization with whom we should consider working, please let me know. If you have used Service-learning and/or Community Service Projects in your work, please call me at 255-7156 or email: crbecker@swcp.com.

Richard W. Becker, PhD, President

EEANM BOARD OF DIRECTORS

All phone numbers are area code (505) unless otherwise noted.

OFFICERS:

Richard Becker

President

255-7156 (h) Albuquerque
crbecker@swcp.com

Mary Steuver President Elect 867-4661 (h/w) Placitas sse@nmia.com

Mary Dwyer

Past President

254-3570 (h/w) Albuquerque
dwyermc@unm.edu

Dana Vackar Strang Secretary 827-3809 (w) Santa Fe dvackar@slo.state.nm.us

Deb Thrall, PhD. Treasurer 277-0718 (w) Albuquerque dthrall@unm.edu

Stephanie Dobbie

Newsletter Editor 256-4343 (h/w) Albuquerque stephaniestansbury@earthlink.net

BOARD MEMBERS AT-LARGE

Bonnie Dils 452-5205 (w) Albuquerque BDils@cabq.gov

Cheri Vogel 827-4272 (w) Santa Fe cvogel@seo.state.nm.us

Jean Szymanski 842-3293 (w) Albuquerque jszymanski@fs.fed.us Kevin Holladay 476-8095 (w) Santa Fe kholladay@state.nm.us

Peg Sorensen 234-5983 (w) Carlsbad peg_sorensen@blm.gov

Have a message for the Board? E-mail them at eeanm@yahoo.groups.com

EEANM_{NEWS}

Reflections on the EEANM Conference

EEANM awarded 4 scholarships to educators interested in Environmental Education to attend this year's conference at Ghost Ranch, September 22-24, 2002. Scholarship recipients were asked to reflect on their experience. EEANM appreciates the enthusiasm and expertise that these individuals bring to the association.

Meliza Wetzler writes:

I would like to thank EEANM for allowing me to be one of the recipients of the honoraria for attending the 2002 Leadership Summit and Annual Meeting of the Environmental Education Association of New Mexico at Ghost Ranch in Abiquiu, New Mexico. It was such an honor to attend the conference, and the scholarship funds really were of great assistance.

When I was notified about the scholarship, the message said that EEANM hoped that I would learn from the conference, meet new people, and enjoy my time at Ghost Ranch. Well, I can say without reservation that all of these goals were accomplished and surpassed. The scholarship was both enabling and encouraging. As a young woman beginning the journey into Environmental Education, it was inspiring to share in a conference that brought people together from a wide geographic community who have all different levels of experience and insight. I enjoyed sharing the space at Ghost Ranch. It was a fantastic "classroom".

I enjoyed camping under autumn skies, communing around the campfire, gazing at the Williamson's Sapsucker during Jessica's New Mexican Birds class, walking the un-nature trail with Donna Thatcher, smelling the cottonwood tree, then measuring its girth with a dollar bill in Mary and Tish's Bosque Education Guide presentation. I will remember walking in the red rocks at sunset and gazing at the stars with a star chart, then finding the star shape in the cottonwood's branch. I will also remember watching Deb Thrall and Peg Sorensen "burn" acres of land in a computer simulated fire education curriculum, and now I feel like dreaming up more creative ways to connect people in positive ways with the environment that they live in. So, thank you for the inspiration and rejuvenation!

Kelly Nolan writes:

As an educator, I have attended countless workshops, conferences, and seminars. Attending these meetings can be a chore if the sponsoring group is disorganized and the presenters dull. However, the Environmental Education Association of New Mexico Conference in September was one of the most professional and refreshing conferences I've ever attended! From registration to the closing meeting, I was pleased to find tip-top organization (thanks to Cassie!), affordable fees, options regarding food and accommodations, and a gathering of committed environmentalists all choosing to spend their beautiful weekend at Ghost Ranch educating and inspiring others.

I attended several enjoyable and informational workshops. My favorites were the Xeriscape Curriculum and the Bosque Education Guide workshops. Progressive and accessible work is being done in the area of environmental education at the Office of the State Engineer and the University of New Mexico! I have to say I was amazed and impressed by the curricula and the presenters, Cheri Vogel and Mary Steuver respectively. Both guides are extremely important texts full of user-friendly, interdisciplinary lessons and experiments. The commitment and enthusiasm behind these guides is unparalleled in the realm of education. I can't wait to use them in my classroom!

The weekend was full of fun, education, and a general feeling of work worth doing. EEANM has many plans for future endeavors, including getting the word out to educators statewide. It's arduous work, but as Rachel Carson once said, "Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts." Kudos to those of you who organized and participated in such a brilliant conference. And add me to your list of reserves.

(Continued on page 4)

EEANMNEWS

Reflections on the EEANM Conference, continued from page 3

Brian D'Ingillo writes:

I am a first-year graduate student at the University of New Mexico in the Environmental Education program. This being my first conference of any type, I did not really know what to expect from this experience. I was first off very impressed with the scenery of Ghost Ranch and after checking in with the radiant Cassie Benson, we were able to set up camp and hurry off to a paleontology walk. We learned all sorts of interesting things from Alex Downs, an interesting and humorous individual who guided us on a walk outside pointing out various rock types and fossils found there. That evening we were treated to a "Be Bear Aware" and a "Noxious Weeds" presentation. We ended the night with a roaring campfire of friendly folk and the entertainment of a fiddle and guitar.

The next day we had our pick of different workshops. I chose the Nature Walks to Remember presentation. I learned some invaluable, environmentally oriented activities including a watercycle sun-catcher that I got to make and take home. I then chose the presentation of New Mexican Birds by the Audubon Society of Santa Fe. We were taught some interesting stuff about the structures of different feathers and got to handle some real bird specimens. Then they lead us outside with binoculars in hand to do

some birding. Fortunately, we saw two different species of sapsuckers, amazing! After lunch we were treated to a lecture by William Dubuys who presented us with some interesting things to ponder, such as "What if the west coast of North America was colonized first?" This same day I had the opportunity to take a hike to the beautiful Box Canyon on site, quite a complementary experience.

The last day I attended the Bosque Education Guide workshop, where yet more environmental education activities were presented including an intimate 10 minutes rediscovering a cottonwood tree. The last workshop consisted of a Fire Prevention CD-Rom that would have great classroom potential. The end of the conference was the EEANM's annual meeting where I got to witness the politics behind the show. The exchange of ideas and brainstorming was truly inspiring. At various times, I had the opportunity to talk with people of different environmental organizations of the state, which is invaluable. The conference as a whole far exceeded my expectations. The people were very informative yet open to suggestion. It was organized exceptionally and was a productive learning experience for everyone of all levels. I look forward to being a larger part of an EEANM Conference in the future.

(Continued on page 5)



Mary Steuver and Tish Morris demonstrate the Bosque Education Guide for attendees at the EEANM conference.



Kristen Fedesco and Stephanie Dobbie experiment with the new Xeriscape Curriculum.

EEANM_{NEWS}

Reflections on the EEANM Conference, continued from page 4

Kevin Mohr writes:

In a scenic portrait by Georgia O'Keefe, where City Slickers test their endurance and wits in a harsh but awe-inspiring environment, the annual EEANM conference was held at Ghost Ranch. With such an introduction, why wouldn't anyone come to the conference? For those that did not attend, here is a quick synopsis of what you missed. The EEANM conference is the ideal place to expand our own awareness, gather materials and information, and most important, to socialize, network, and relax.

First on the list for knowledge enhancement was the amazing paleontologist tour of Ghost Ranch. Our humorous guide Alex Downs gave us an up close and personal look at fossilized bones and the geology of Ghost Ranch. There were also Noxious Weeds and Bear Aware/Stewardship presentations and a wonderful discussion lead by Bill deBuys. We had graduate students to visitors from Minnesota adding their opinions and ideas. Workshops included a watershed curriculum to nature walks to Project Wild. There was a plethora of educational mini-seminars to expand our own minds. I am not what they would call a "Birder," but after the New Mexican Birds workshop, I will no longer ignore my flying friends.

Another great aspect of the conference is collecting 'stuff.' What we gather from the conference

passes on along the educational tree. For example, part of one of my graduate classes is to put on a children's fair. A few of my colleagues and I gathered anything from Bear Aware Coloring books to Bat Conservation fact cards to posters and pencils to give out at the fair. As an employee of Talking Talons Youth Leadership Center (TTYL), I supplied the materials and information from some of the workshops that I attended to the educational coordinator at TTYL in hopes that they would be able to use these new ideas in their educational programs. And for my self, I found out about New Mexico's Friends of the Forests organization and can now say that I am a member.

Lastly and most important, the relaxation and social networking. Ghost Ranch had many opportunities for such activities. Enjoying intellectual and philosophical conversations during the camp fires with a guitar and violin for background music was one of them. Quick hikes during and after the conference is another. We are not just environmental educators getting together, but friends as well. The Annual EEANM Conference is a place to receive it all—new ideas, enlightening conversations, gathering information, expanding our minds, and above all, meeting new people with a similar compassion for the outdoors. Hope to see everyone at next year's conference!



Mary Dwyer presents scholarships to Kevin Mohr, Kelly Nolan and Brian D'Ingillo at the EEANM conference.

Announcement

Peg Sorensen, EEANM Member-at-Large, has moved from Albuquerque to Carlsbad, NM. Peg still works for the Bureau of Land Management and is still the state lead for Interpretation and Environmental Education but now conducts these activities from Carlsbad along with her new position as environmental coordinator. Peg plans to remain active with EEANM so don't hesitate to contact her or stop by and visit, especially if you are also in the southeastern part of New Mexico. Her contact information is as follows:

Email: peg sorensen@blm.gov

Phone: (505) 234-5983

Mailing address: P. O. Box 722, Carlsbad, NM 88221

Physical location: BLM Office, 620 E. Greene St.,

Carlsbad, New Mexico

(Continued from page 1)

work with younger students. Yet, when they graduate and land their first jobs, these same biologists are better prepared for the "outreach" aspect of their new employment. On the other hand, education majors frequently state that their biggest obstacle in the class is their own fear of science. The hands-on approach and involved discussions of background information and data interpretation usually help these students overcome their fears. When these educators find themselves in classrooms after graduation, they are often looking for ways to involve their own students in real-science applications.

Originally the BEMP intern class evolved out of a need to implement a quality assurance/quality control aspect to the newly established monitoring program. Program managers were looking for ways to insure data was systematically and accurately collected and recorded. With a growing number of BEMP sites, the staff wanted more people instructed in the collection process to supervise the effort. Being a university-sponsored program, the obvious source of people-power was students. Quickly the class developed into a much richer experience for both students and program.

The first intern class had a more-or-less self study format involving three students in the fall of 1998. By the spring of 1999, the class was meeting formally with nine students. One of the course assignments included a final report in which students were urged to make recommendations to improve the class or the program. From student recommendations since then, an intense course curriculum has evolved today. Field trips, lab exercises, writings on readings, and special projects have all been added to the class at the urging of past students. Over the years, course handouts have grown, and this semester students were greeted on the first day of class with an Intern Handbook that spanned over 200 pages of instructions, readings, site maps, data results, and other program related information.

The class textbook stands out as an oddity among the technical bulk of biology texts on the University Bookstore shelves. The trade paperback, *The Geography of Childhood* by Gary Nabhan and Stephen Trimble, is a collection of the authors' essays on why children need to spend time in the outdoors. In the intern class, students discuss with an experienced school teacher the value of having kids learn in outdoor settings.

The class has been held every semester since 1998, except for the summer of 2000 when severe fire conditions limited access and staff availability. The class size ranges from 4 to 18 students, with an optimum class size being around a dozen. Each season offers it's own variations to the experience. Fall interns experience a strong emphasis on program instruction as the secondary students they work with are also new to the program. Vegetation transects offer additional field opportunities. Spring students add cottonwood sexing to their experience, as interns are sent out to identify male and female trees based on catkin morphology. The course is somewhat compressed for the summer students, who get less hands-on experience working with younger children because many of the school groups are out of session.

The teaching team includes Professor Emeritus Cliff Crawford, forest ecologist Mary Stuever, environmental educator Mary Dwyer, data manager Kim Eichhorst, and school teacher Dan Shaw. Course participants have both informal and formal access to a wide berth of ideas and perspectives on the bosque.

In addition to becoming a core part of the Bosque Ecosystem Monitoring Program, the BEMP Intern Course offers an incredible opportunity for biology students to develop outreach experiences and education majors to learn to incorporate real-science in their teaching programs. In addition, the course is a fun way for any adult to learn more about the bosque and long-term monitoring efforts.

UNM Graduate Students make Bosque Presentation in North Carolina

Meliza Wetzler and Allison Ramsey, environmental education graduate students at the University of New Mexico, traveled to Cedar Rock Base Camp, North Carolina in early October to share information on two local bosque programs. The conference, entitled *The 7th Annual Women's Outdoor Leadership Conference*, was entirely dedicated to women outdoor educators and leaders from across the nation. Wetzler and Ramsey spent 1½ hours sharing how the *Bosque Education Guide* and the *Bosque Ecosystem Monitoring Program* (BEMP) use a local and threatened ecosystem as an outdoor classroom for developing ecological knowledge and a sense of place. Wetzler has been assisting with the Bosque Education Guide, particularly developing activities, directing field-testing, and correlating the guide with state standards. Ramsey is currently an intern with BEMP working with students and their teachers to collect long-term ecological data.

The River Continues to Flow for the Student Ecology Research Program (SERP)

Contributed by Rebecca Salem

We are very happy to announce that the New Mexico Museum of Natural History and Science has received a grant from the Institute of Museum and Library Sciences (IMLS) that will support SERP's full time, administrative staff for the next three years. This is a giant accomplishment in that it will enable us to have the time and funding to expand our reach to include more communities and schools over the next few years. Outreach work will begin this fall and continue through the winter months with our Program Coordinator and Assistant traveling around the state to recruit new teachers and students. We are happy to hear from anyone who is interested in working with us next summer.

Summer 2002 was a great accomplishment for our teachers and staff with all eleven programs completing their research and presenting their findings to friends and family at the Final Congress in early August. Our programs tested the waters on the Rio Grande from the Chama River all of the way down to its passage into Texas on the southern border of the state. In conjunction with these water quality assessments, students looked at the biodiversity of the vegetation and insects in the adjoining bosque (or lack of bosque, as the case may be).

We were very proud to work with two native communities this summer, Cochiti and Jemez Pueblos. These programs provide us the opportunity to teach in an environment where the student's level of ownership and historical connection with the landscape takes on another degree of meaning. This is sometimes a challenge and always a gift; an important step in

realizing the connection we all have through our natural resources.

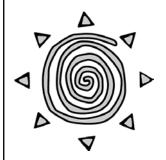
We found that even after 9 years of programming we still have some kinks to work out and continue to try and make our curriculum more teacher and student friendly. With new schools to work with on the horizon and new ideas in our back pockets, we are sure to continue growing in the coming years. Thanks to all of the support we received from NM MESA, Middle Rio Grande Bosque Improvement Group, the Sierra Club, the Jardines del Bosque Research Station, Albuquerque Open Space, the Albuquerque Academy, and the USDA Forest Service SW Region.

Here is some of what our students said when we asked them what was the most valuable aspect of their experience with us this summer:

- "Going to the Gila was really fun. I really learned a lot and to appreciate nature also when we did the water samples there and at the river. It really taught me to be more conscious about what I throw outside on my garden and yard and stuff like that."
- "Getting involved with the land around me."
- "The least valuable part is that we aren't able to do this all year long."
- "I think learning about New Mexico's ecosystem was most valuable for me.
- "The most valuable part was learning to care for the environment and know what was in it."

Do you have a favorite web site?

Let us know and we will put it in the next newsletter. We are always looking for new places to go for environmental education resources. Send your web sites to: stephaniestansbury@earthlink.net



Stay Connected with EEANM

http://www.eea.nm.org

By visiting our web site, you can get up-to-date information about events, job announcements, volunteer opportunities, requests for grant proposals and more.

A Report from the EE Certification Meeting in Galveston, Texas, April 17-19, 2002

Contributed by Dr. Deb Thrall

Mary Dwyer, EEANM past-President, and Dr. Deb Thrall, WERC Professional Development Coordinator and EEANM Treasurer, represented New Mexico at an Environmental Education Certification Regional Conference in Galveston, TX on April 17-19, 2002. Also in attendance at the conference were representatives from Utah, Texas, North Carolina, South Carolina, Georgia, Louisiana, Oklahoma, Florida, Kentucky, Missouri, U.S. Forest Service, Project Learning Tree, Council for Environmental Education, Environmental Institute of Houston, Northern Illinois University, and the North American Association for Environmental Education.

The conference began with a review by Dr. Bora Simmons of Northern Illinois University of the Guidelines for the Initial Preparation of Environmental Educators. The six themes were covered: Environmental Literacy, Foundations of EE, Professional Responsibilities of the Environmental Educator, Planning and Implementing EE, Fostering Learning, and Assessment and Evaluation.

Then each team was charged with writing three questions, priorities, and concerns that were specific to our state. Over the next two days, each state and agency presented information about their programs.

<u>Georgia's</u> certification process is to provide a framework for professional development/adult education and is all about collaboration and partnerships. Courses are going to be offered for CEU's not specific credit for degrees. The offering and information is on line at www.eeingeorgia.org.

<u>Florida</u> has no statewide plan or framework like K-12 learning outcomes. In terms of valid research, they feel we use a lot of arguments about the intrinsic worth of EE rather than having data.

Kentucky has started the certification process even though their board of directors was dead set against it due to the controversy involved. They are calling it a credentialing process rather than certification, which is just for nonformal educators. All teachers must show on their exit exam that they can teach EE, however it's up to the universities to set the program the way they want. They have a preservice certification and are working on a licensing endorsement for the teachers system.

<u>Louisiana</u> has no certification process but they do have a Science in the Environment strand in the state science standards and have correlated this with K-6 and 7-8 for nonformal educators. All this information is on the website (<u>www.louisianaschools.net</u>) under K-12 curriculum.

<u>Missouri</u> began in 1996 by forming a governor's task force, which is housed in the Department of Conservation. They hired 17 education consultants to provide trainings for educators, which were aligned with "show me" standards with graduate credit. The programs follow the guidelines for learning and have a teaching component and community action component. They require 190 hrs over 4 years and will credit 50% of hours required for this first year.

New Mexico has no certification plan and was not thinking about it until the spring 2002 EPA meeting in Dallas. There are strands on standards and certification at the 2002 fall conference, but feel that we should be trying to build the organization before we make plans for the certification process.

North Carolina's program has been in effect for 6 years out of the state office of EE. State legislation funded this and the creation of an EE master plan. It requires a total of 200 hours that are written into community colleges' courses so you can do it as part of a 2-semester class. Some colleges use this as an independent study or internship. All state park rangers, state park superintendents, any zoo aquarium employee, and state forest superintendents are required to take this for their job.

<u>Oklahoma</u> has no formal EE program. They will be doing a needs-assessment survey statewide then will hold a leadership clinic with non-traditional EE, and will generate a master plan from that.

In <u>South Carolina</u>, EE is mandated in the schools but it is left up to local school districts to teach it and determine whether it's in science or social studies. There are no guidelines, curriculum standards, or accountability.

In $\underline{\mathbf{Texas}}$, they call it a PDS - professional development

(Continued on page 9)

(Continued from page 8)

system - to avoid the license/certification process. They require 40 hours of EE training to get a certificate and target professional environmental educators. At present, they only have 1 level but have considered doing more later. They require 30-40 hours per year of service credit after certification to continue.

<u>Utah</u> has identified goals and priorities focused on nonformal education, as they don't have the structure that the formal educators have in terms of training and regulation. They held a retreat to develop UT's guidelines based on national standards using a rubric. They felt that these raise the bar on EE and legitimizes it.

The group then considered the following question – "What are the strengths and challenges of developing state EE certification programs?" Some of the group answers were as follows:

Strengths

- Legitimizes the profession
- Meets teachers' needs for standards/assessment
- Provides credibility/consistency of programs
- Clarifies range of competencies and skills among EE educators
- Provides a guide for professional development
- Help delineate education from advocacy

Challenges

- How can EE certification programs complement pre-existing certification programs?
- The time for the individual to do this
- Funding and infrastructure
- Who's administering this process? Why and where?

In closing, Richard Osorio from the University of Georgia explained that the national competencies would not dictate what occurs at the state level. You could be certified with one or the other or both. The national program is research based, rigorous, competency based, has learner outcomes, and student assessment.

For NM's plan of action, we decided to:

- 1. Do a much more extensive assessment of the EE providers/practitioners/educators in NM to see if they think it's necessary to have EE certification.
- 2. Begin a dialogue with state and federal agency heads to get the information out about the national initiative and what other states are doing
- 3. Draft an assessment document to send to schools, state and federal agencies to identify possible stakeholders to get interest and input
- **4.** Reconvene the statewide EE Task Force to talk about the state wide coordinator position and this certification initiative
- **5.** Do more research on what is currently being implemented around the nation to learn more about tailoring this for our state. We would appreciate any feedback you can give us on these issues.

ECO-ED The Listserv for New Mexico Environmental Educators

If you haven't signed on to the eco-ed listsery, you are missing a great information link on what's up in New Mexico Environmental Education. Signing up is easy; just follow the directions below.

- 1. Prepare a new e-mail message.
- 2. In your "To" field, type: mayordomo@lists.nm
- 3. In the body of the message, type: subscribe ecoed your email address For example: subscribe ecoed leo@aldo.org
- 4. Very quickly, you should receive a return message saying: Welcome to the ecoed mailing list..." and a second message saying "Subscribe ecoed barney@purple.org Succeeded"
- 5. To send a message to the listsery, address it to: ecoed@lists.nm.org
- 6. To unsubscribe from the listsery, send a new email to: majordomo@lists.nm.org In the body, type: unsubscribe ecoed your email address
- 7. To reply to an individual, please create a new email message with their email address in the "To" field. Do not press "Reply" or your message will go to the entire listsery.

The Boston TEE Conference

Contributed by Cheri Vogel

The Boston TEE Party, The North American Association of Environmental Education 2002 annual conference, drew approximately 800 participants to Boston's Park Plaza Hotel. The conference offered its usual variety of programming with 22 field trips, 9 workshops and approximately 250 sessions.

All of the programming was broken into four strands that provided the themes for the conference: environmental education through time, community character and community appearance, environmental justice, and the role of higher education. The most dominant theme surrounded community character. Several presentations focused on the role of environmental education in promoting a sense of place by engaging in community action. Edward McMahon of The Conservation Fund spoke of the need for communities to maintain their uniqueness so that people will have a sense of place. A community's uniqueness provides identity and invokes a sense of pride and protectiveness. The inhabitants can then realize that the environment is not just "the rainforest" but includes all of our surroundings.

A couple of my favorite sessions addressed soccer moms and the blurred lines of art and science. What Can We Say to Politicians and Soccer Moms to Make Them Care About Environmental Education? presented by Mary Paden (GreenCOM/Academy for Educational Development out of Washington DC) and Kelly Aylward (NEETF), addressed tactics used to turn key groups into advocates for environmental education. Too often environmentalists and educators go after what they called the "low-hanging fruit"— those groups that are the easiest to reach. The presenters suggested that in order to reach the harder groups such as soccer moms, politicians and school principals, we as environmental educators must help them meet their goals. For example, most soccer moms would like for their children to do well in school, be prepared for the future, and be civically responsible. It is our job to show the moms how environmental education can improve the students' knowledge across disciplines, provide students with the real world tools they will need for their future, and when combined with community outreach, builds caring children who become civically responsible leaders. The trick is to find out what are the main concerns of your key groups, then tie into those concerns.

Leeann Woolery from the Puget Sound

Environmental Learning Center presented Blurring the Boundaries: Exploration at the Intersection of Art and Science. Her method for environmental education invoked all of the senses and showcased the results through art. She challenges the traditional journaling techniques by including the process of generating the art into the learning. While exploring a wooded area, Ms. Woolery came upon a small wash that was clogged with debris. She recreated her discovery on paper by envisioning the spot before the water. Then she added layer upon layer, using her pencil with pressure and intensity meant to match that of the rushing water. She felt she was living the experience of the water, leaves, and brush as it became entangled in the wash. The result was not meant to be a work of art but a regeneration of the energy she felt at that spot. Another example of her work was a forest canopy. She would sit in the same spot and recreate the scene in front of her using several different methods; each time she learned something new about the forest in front of her. She used watercolors and saw the richness and variety of colors in the trees. She changed to pencil and saw the strength and beauty in the trunk and branches. She substituted charcoal and sketched only the movement she saw, finding the animals and the wind. She call this process Art-Based Perceptual Ecology and it is the basis for her doctoral thesis.

In addition to the formal sessions, *The Boston* TEE Party broke up the sitting time with exhibitors, an Author's Corner, a Curriculum and Resources Fair, and the Share Fair. This informal time allowed for networking and gathering of resources. The resources and knowledge that can be accumulated at the NAAEE annual conference is virtually unlimited. Each presentation inspired new ideas and each participant brought their own experiences to share. Every year that I have had the good fortune to attend this conference I have come away inspired and validated. It gives me the energy and ideas to get through another year. I look forward with great anticipation to next year's conference. Besides the reuniting of old friends and the discovery of new ideas, next year's conference is in Anchorage, Alaska!

For more information on the North American Association for Environmental Education and their annual conference, please visit their web site at http://www.naaee.org/.

We're Planning A Water Festival for Santa Fe!

Contributed by Susan Gorman

At a Water Festival Workshop held in Santa Fe in March, folks agreed that a Water Festival would be great for Santa Fe students. So, planning has been moving forward and the Festival will be held on March 13 & 14, 2003 at Sweeney Center. You are invited to submit an application to present an activity for the students. Here are the guidelines!

- Hands-on and Brains-on: Get the students involved with a hands-on and/or brains-on activity. Involve them and they'll remember!
- Appropriate for 4th Grade Students: Keep vocabulary and concepts simple. If you are not sure, test your activity on several 10 year old students!
- Fun and Interesting: Use your imagination. Bring interesting equipment, models, or gadgets. Create an activity that uses all the senses.
- Factual: Stick to the facts; present them in a memorable way; reinforce them!
- It's Not Just Science: Use art, theater, history, geography, math and science in creative combinations to help students learn about interconnections.

If you would like to be a presenter but need some ideas of "hands-on" water activities, please let us know. We have plenty of ideas that may interest you. There will be 10 to 12 concurrent activities repeated 5 times each day. Activities will last 25 minutes with 8 minutes between sessions and a lunch break at midday. Each class group of 20 to 30 students will attend 5 sessions. If you would like to apply, just go to the website, www.pioneerwest.net, or contact Susan Gorman at 505-259-7190 or waterwiz@pioneerwest.net.

City Aquarium Opens 3 New Exhibits

The City of Albuquerque's Biological Park opened three exciting new exhibits on August 30th at the Albuquerque Aquarium. The new exhibits are "Rio Grande at Central Bridge: Historical and Today", "Rio Grande Cutthroat Trout Stream," and "Ship's Cove".

Just inside the aquarium entrance, the "Rio Grande at Central Bridge" exhibit features two tanks, one with fish now found in the Albuquerque reach of the Rio Grande and the second featuring fish that inhabited the Albuquerque reach of the Rio Grande 100 years ago. Besides offering natural history information, the exhibit underscores the diminishing diversity and loss of species in the Rio Grande watershed. The exhibit design inventively weaves historical and modern elements using a road travel theme complete with a 1950 Hudson parked on a bridge with a mural of the historical Albuquerque skyline as the backdrop.

Designed and constructed in-house, the "Rio Grande Cutthroat Trout Stream" simulates freshwater stream habitat with the swift flow, crystal clear water, and cold temperatures that native cutthroat trout require. A forest mural, fallen logs, and living trees add to the mountain stream ambience.

The "Ship's Cove" exhibit showcases scale models of several historical sailing ships and three of more recent design. This area is enriched with ocean murals and nautical artifacts, a mermaid figurehead, mast and sails, buoys, a ship's bell, lobster traps, maps and an interactive ship's wheel. The area just beneath the stairs recreates a ship's cabin where volunteers will, from time to time, demonstrate the art of model boat building.

The BioPark is an accessible facility. For special assistance in visiting the zoo, please call admissions at 764-6200 or by TTY at 764-6297. Aquarium/Botanic Garden admission is \$7 for adults; \$3 for seniors 65 and older and children 3-12. The Albuquerque Biological Park is a division of the City of Albuquerque's Cultural Services Department. For more information about the BioPark please visit our website at www.cabq.gov/biopark.

Academy Award-Nominated "Dolphins" opens October 19 in the Extreme Screen DynaTheater at the New Mexico Museum of Natural History and Science

Contributed by John Arnold

Imagine floating in the crystalline, turquoise waters of the Bahamas. Sunlight dances off the rippled, white sand banks. Swimming alongside you are some of the most graceful and extraordinary creatures on earth—wild dolphins.

While few of us will ever have the chance to encounter a dolphin in the wild, audiences will feel like they are swimming right alongside these playful creatures when they view "Dolphins", which opens Saturday, October 19, 2002 in the Extreme Screen DynaTheater at the New Mexico Museum of Natural History and Science in Albuquerque.

"Dolphins" was nominated for a 2000 Academy Award for Best Documentary Short Subject. From the dazzling coral reefs of the Bahamas to the wind-swept seas of Patagonia, "Dolphins" takes audiences under the water's surface for a romp with inquisitive Atlantic spotted dolphins, acrobatic dusky dolphins, and the familiar bottlenose dolphin of Flipper fame.

Studying and filming these elusive, fast-moving animals in the ocean environment is a difficult task, but in "Dolphins" viewers will follow young marine biologist Dr. Kathleen Dudzinski, and her two colleagues, mentor Dr. Bernd Würsig and Alejandro Acevedo-Gutiérrez, as they research the communication of wild dolphins with innovative scientific methods and interesting technology. From rarely seen fish-herding behavior to a close-up look at complex communication activities, "Dolphins" will give audiences a fascinating new perspective on the lives of dolphins and their remarkable intelligence.

"Dolphins" also explores the dolphin-human bond, and audiences will be intrigued by the relationship between JoJo, a rare lone dolphin in the Turks and Caicos Islands in the British West Indies and his friend, naturalist Dean Bernal. Dean and JoJo have saved each other's lives on more than one occasion, and their story will stir audiences with the beauty and mystery of interspecies communication.

"The topic has a wonderful appeal to the public and people want to know more about how dolphins communicate," says director and producer Greg MacGillivray. "I wanted to make a film that offered insight into these intelligent marine mammals and that revealed wonder of their habitat, the ocean, and our need to preserve it."

While most of what we know about dolphins comes from studying them in captivity, Dudzinski and her colleagues conduct their research with dolphins in the wild, a more strenuous, time-consuming, even dangerous endeavor. Audiences may be surprised to witness firsthand how scientific progress is made in inches and not miles, and how the slow accumulation of scientific data is passed on, and expanded upon, from one generation of scientists to the next.

"Dolphins", which is narrated by Pierce Brosnan and features the music of Grammy-award winning artist Sting, is produced and distributed by MacGillivray Freeman Films in association with the National Wildlife Federation, the nation's largest member-supported conservation group, and with major funding provided by the National Science Foundation and Museum Film Network.

Two companion books, "Dolphins," by best-selling author Tim Cahill, and a children's book, "Meeting Dolphins," written by the film's star marine biologist, Kathleen Dudzinski, are available from National Geographic Books.

"Dolphins" will be shown during all eight DynaTheater screenings on the opening weekend, October 19-20, then six times a day thereafter at 10 a.m., noon, 1 p.m., 2 p.m., 3 p.m., and 5 p.m. "Journey into Amazing Caves" will be shown daily at 11 a.m. and 4 p.m., except on the opening weekend.

"Cats! Mild to Wild" Exhibit

This exhibit traces the history of cats from wild, exotic felines to America's number one pet. Visitors can "prowl" into realms of feline science, myth, responsible pet care, endangerment, and conservation issues of wild cats. Developed by the Natural History Museum of Los Angeles County, the interactive exhibit inspires children and adults to learn about careers in science, while educating exhibit visitors about responsible pet care and the highly endangered status of wild cats.

New Mexico State Land Office

Ray Powell, M.S., D.V.M., Commissioner of Public Lands



Two Environmental Education Award Winners are Chosen for 2002

Commissioner of Public Lands Ray Powell has selected Monica Arguello, a Los Lunas fifth grade teacher, and Wild Friends, a program of the Center for Wildlife Law, as co-recipients of the New Mexico State Land Office 2002 Rosner Environmental Education Award.

The State Land Office created the Joan and Hy Rosner Environmental Education Award in 1997 to recognize outstanding work by New Mexico educators, who participate in the State Land Office Outdoor Classroom Program or provide other programs that emphasize caring and respect for the natural world. The award is named for Joan and Hy Rosner, former Albuquerque residents, who were champions of environmental education.

"We are pleased to honor Monica Arguello and Wild Friends this year," said Commissioner Powell.
"Their outstanding efforts will enable our children to better understand and appreciate the natural world."

Monica Arguello, a fifth grade teacher at Daniel Fernandez Intermediate School in Los Lunas, was selected because of her dedication to the school's science camp, held at the Ghost Ranch in northern New Mexico. The camp has been held for three years and provides a forum for students to learn about New Mexico's natural environment from individuals, agencies, and non-profit organizations. The camp has grown to about 200 fifth grade participants.

"The science camp at Ghost Ranch lets students experience nature and connect the concepts from their textbooks to what is real," said Arguello.

Wild Friends, an 11-year-old program of the Center for Wildlife Law at the University of New Mexico's Institute of Public Law, was also selected for its exceptional efforts to involve young people in conservation policy. Wild Friends is a network of students, teachers, and mentors that explore and seek common ground solutions to wildlife issues.

A unique blend of civics education and environmental science, the Wild Friends program brings hundreds of children to the New Mexico State
Legislature each year, where they learn about the political process and how to be advocates for wildlife bills and memorials. At the 2002 State Legislative Session, Wild Friends students from around the state wrote and lobbied for House Joint Memorial 13, supporting the work of the New Mexico Black-tailed Prairie Dog Working Group. Wild Friends also supported House Joint Memorial 1, which passed proposing that New Mexico consider designating the Sandia hairstreak as the official state butterfly.

"Wild Friends is deeply honored to receive this award, especially since Joan and Hy Rosner played such a key role in the creation and growth of the organization," said Director Carolyn Byers. "We are proud of our program and also value highly our partnership with the State Land Office."

Previous winners of the Rosner Environmental Education Award include: Laura Peña, an environmental educator from Santa Ana Pueblo, for 2001; Dr. Elaine Hampton, a professor of science education at the University of Texas at El Paso, Texas, for 2000; Tina Koranda, an eighth grade teacher from Hurley, New Mexico, for 1999; and Becky Wing, a science teacher from Farmington, New Mexico, for 1998.

The State Land Office's Outdoor Education
Programs makes state trust lands available for studying
plants, wildlife, soils, archaeology, and other subjects,
providing teachers and students with opportunities to
learn about nature in their own communities. Special
environmental education easements on state trust land
provide a rich, natural environment for learning. State
Land Office personnel help prepare lesson plans and
provide instruction for these special "tailgate" classrooms.



WERC Annual Water Festival Dates Set

The Bi-National Water Festival, formerly known as the Tri-City, Tri-State, Bi-National Water Festival, was held October 15 in Las Cruces, NM; October 18 in Cd. Juárez, Mexico; and October 22 in El Paso, TX. Coordinated by WERC, the festival is expected to draw more than 10,000 elementary and middle school-aged children.

The festivals bring together exhibitors from nearly 300 environmental and governmental organizations who give interactive presentations on such topics as the water cycle, water culture and history, aquifers and water conservation. It is a collaborative effort among more than 100 organizations and is supported with grant funding from the U.S. Bureau of Reclamation, the U.S. Environmental Protection Agency and other local agencies.

High School Environmental Design Contest

WERC will soon be taking applications for the 6th Annual High School Environmental Design Contest, which will be held on the New Mexico State University campus in Las Cruces, NM, the week of April 6-10, 2003.

The high school contest, which coincides with WERC's Annual Environmental Design Contest for university teams, was developed in 1998. This unique and innovative contest is designed to introduce high school students and their teachers to environmental research and engineering design. It also provides competition as well as an outstanding learning experience.

The process involves a six- to seven-month period in which the design team will be involved in conducting research, developing a design, acquiring materials, demonstrating a bench-scale prototype, analyzing regulations, writing formal reports, generating a scientific poster display and oral/visual presentation.

Senior-level environmental professionals from across the U.S. representing academia, government and industry serve as judges during the design contest.

For more information, contact Bryan Swain, WERC Contract Training Coordinator, (800) 523-5996, or visit www.werc.net.

High School Students Examine Cerro Grande Fire

Nearly 50 high school students and teachers from throughout New Mexico participated in a weeklong research program held in Los Alamos, July 14–19 to examine the Cerro Grande Fire that occurred nearly a year ago in the Los Alamos area.

Sponsored by WERC: A Consortium for Environmental Education and Technology Development and Los Alamos National Laboratory, the Summer Environmental Academy focused on the Cerro Grande Fire Rehabilitation Project. It included field trips to the laboratory and Bandelier National Monument, presentations by environmental professionals, hands-on research and laboratory activities. Students learned about the issues encountered during the emergency response to the fire, recovery and the environmental consequences of the fire.

The academy's objective was to show students how science, technology and mathematics relate to careers in engineering and environmental fields and to help teachers implement a successful environmental curriculum into their classrooms. The academy culminated with student presentations of group research projects that they worked on throughout the week.

"This is a great opportunity for students to have hands-on experience with a real environmental crisis," said Dr. Abbas Ghassemi, executive director of WERC. "We hope the experience will make a positive impression on them when making choices for college studies."

WERC is a consortium comprised of New Mexico State University, the University of New Mexico, the New Mexico Institute of Mining and Technology, Diné College and Sandia and Los Alamos National Laboratories. For more information, contact Deb Thrall, WERC Professional Development Coordinator, (800) 523-5996, or visit www.werc.net.

MATERIALS & OPPORTUNITIES

Share the Adventure: Exploring Fire Science

http://www.blm.gov/education/LearningLandscapes/menu/news_02.html

What: A free, unrestricted, live 1- hour interactive satellite broadcast

When: Thursday, November 7, 2002 (times and downlink coordinates will be available at

http://www.blm.gov/education/LearningLandscapes/menu/news_02.html)

Who: Hosted by the Bureau of Land Management (BLM)

Where: Your classroom

Why: To help viewers better understand fire science and fire management challenges.

The Bureau of Land Management's "Exploring Fire Science" will take participants on a virtual field trip to see the effects of wildfire, get a behind-the-scenes look at the National Interagency Fire Center in Boise, Idaho and learn how communities are assessing and managing the risks of wildfires. The program will address how and why fires start, develop and spread; the role of fire in ecosystems; fire behavior; and fire management. Fire experts will be available by phone and fax to talk to students.

The program is geared for the middle-school audience but would be of interest to all ages. It is correlated to National Science Education Standards, standard F: science in personal and social perspectives. After viewing the program, students will gain an understanding of natural hazards; risks and benefits in association with natural hazards; and populations, resources and environments. A free educator's guide and classroom materials will accompany the program.

To view the program, your school or school system will need access to a C Band satellite link and a monitor. Many cable companies, school systems, school districts, district or regional media centers or State educational television stations may be able to provide your classroom with the program through an internal cable channel. There are no restrictions on rebroadcasting. For more information, contact Carolyn Cohen at (202) 785-6583 or carolyn_cohen@blm.gov.

Bosque Education Guide Receives Funding for Fall Field-testing

The Bosque Education Guide (BEG) update project recently received additional funding from the Bosque Initiative Group, U.S. Fish and Wildlife Service, to conduct a thorough field-test of the newly updated guide. BEG was first published in 1995 by a grass-roots coalition of educators and was largely based on a technical Fish and Wildlife Service publication: The Middle Rio Grande Ecosystem: Bosque Biological Management Plan. The goal of the guide was to make information about the bosque accessible to teachers and their students.

In 2000, the initial group reassembled to update the guide, particularly including information on restoring the river and bosque. Over 100 people have assisted over the past two years in updating and creating activities, compiling background information, and expanding the guide to a kindergarten through high-school format. Although the guide was scheduled to be released this fall, team leaders felt the guide would benefit from a rigorous field test by educators to be sure new activities and information are clearly presented and work well with students.

Plans are to host a day-long workshop with participating educators in late October or early November. Teachers will then use as much of the guide with their students during the next 6 to 7 weeks. Revisions will be completed in January, and the new guide will be available to the public by February of 2003.

"Although we are delaying the release of this anxiously awaited resource, we think in the long run educators will really appreciate the extra effort put into the guide as a result of the field test," explained Mary Stuever, one of the BEG executive committee members. Anyone wishing to participate in the field test should contact Mary at email: sse@nmia.com or phone: (505)867-4661.

MATERIALS & OPPORTUNITIES

Vital Greens Seed Starter Kit, Just Add Water & Love! TM

http://www.justaddwaterandlove.com

The Vital Greens Seed Starter Kit offers an amazing two-three week Nature study that includes: easy growing instructions with two planting trays, organic seeds and potting soil, and a soil nutrient packet. This process of learning indoors the basic life cycle of plants (whether in the classroom or the kitchen), begins with seed soaking, planting and germination; followed by the hatching of young seedlings that require simple daily tending (Just Add Water and Love! TM); and soon results in the harvest (and tasting) of the first 'crop' - within just one week of planting!

The Vital Greens Seed Starter Kit is a science education tool, developed and marketed by Melanie Greer Deason. She is founder of the New Mexico-based business, Vital Greens, and is also a grower for Farmers' Markets in Santa Fe and Los Alamos. At the prompting of several customers, she created the Seed Starter Kit as a medium for adults and youth (grades K-12) to grow edible organic 'living foods'. Ms. Deason states that "living foods, which are the gift of edible sunshine, are Nature's healthiest foods - because they are still alive before being eaten, and not stored, refrigerated, cooked or dried. Youth, parents, and teachers find the Vital Greens Seed Starter Kit easy to understand and fun to use in their daily lives – whether at school or at home – plus your pets will love them, too! Vital Greens revisits an ancient way of growing food and makes it available to all ages."

Vital Greens grow into great tasting and nutritious foods that promote good health for people and pets! Two options for growing the **Seed Starter**

Kit are available - as either Sunflower lettuce or Wheatgrass. Sunflower lettuce (baby sunflowers) are high in protein and great in salads, sandwiches or just by themselves; plus they love to be eaten and are guaranteed to love you back! Even some cats and dogs like them for a treat or cut up with their food – and pet birds love them, too. Wheatgrass makes nice tabletop decorations, is juiced for its healing properties (it's known to help chemotherapy patients), and wheatgrass even provides necessary greens for our pets (cats, dogs, Guinea pigs, etc.) and rescued wildlife (baby squirrels and bunnies, too). A percentage of proceeds from sales of the Vital Greens Seed Starter Kit are donated to animal/wildlife rescue and rehabilitation.

Instructions with the Vital Greens Seed
Starter Kit are provided in both English and Spanish Solo Agreges Agua con Corazon! The cost of each
Seed Starter Kit is \$12 (US Funds). Add \$4
shipping/handling if sent to a New Mexico address, \$6
elsewhere in the US. For each additional Kit sent by US
Mail to the same address: add \$3 in New Mexico; \$4
out-of-state; with FREE postage if 10+ ordered.

For additional information, call (505) 438-7708 in Santa Fe, or e-mail Melanie Deason at: vitalgreens@cybermesa.com. To order, please specify whether the Sunflower Lettuce or Wheatgrass Seed Starter Kit is desired. Mail your money order (please no cash or checks), and include your return address and phone number (please print), to: Vital Greens, c/o Melanie Greer Deason, PMB # 763, 3530 Zafarano Drive, Suite #6, Santa Fe, New Mexico 87507.

Youth Garden Grants

http://www.kidsgardening.com/grants.asp

The National Gardening Association awards 400 Youth Garden Grants to schools, neighborhood groups, community centers, camps, clubs, treatment facilities, and intergenerational programs throughout the United States. Each grant consists of an assortment of quality tools, seeds, and garden products. To be eligible, groups must plan to garden in 2003 with at least 15 children (3-18 yrs old). Selection of winners will be based on demonstration of a child-centered plan that emphasizes children directly learning and working in an outdoor garden. Selection criteria include leadership, need, sustainability, community support, innovation and educational, environmental and/or social programming. Application deadline is November 1st.

MATERIALS & OPPORTUNITIES

Pilot Test an Earth System Science Curriculum

http://www.agiweb.org/education/cues/pilottest.html

The American Geological Institute invites experienced middle school Earth science teachers (grades six, seven, or eight) to apply for the national pilot test of Project CUES: Constructing Understandings of Earth Systems.

Testing one unit of this NSF-funded curriculum project will require 9 to 10 weeks (one academic quarter) of class time. The first stage of pilot testing will run January through March 2003, preceded by a three-day training workshop in Washington, D.C. in December 2002.

Project CUES is supported through a grant from the National Science Foundation (Grant No. ESI-0095938).

ViewFinders from The Dunn Foundation

ViewFinders is an interdisciplinary upper elementary curriculum emphasizing connections between the environment, community and aesthetics, that:

- Introduces students and teachers to the concept of the visual environment.
- Enhances an understanding of the interrelationship between the built and natural environment.
- Creates awareness that the visual environment affects our economy and quality of life.
- Develops students' appreciation of their community's appearance, and encourages a critical analysis of it.
- Develops an understanding of the mechanisms by which change in the visual environment can be implemented.

The eight activities in *ViewFinders* increase awareness of the visual environment through a hands-on approach to learning. The activities can be used either as a complete unit or as supplementary lessons. Teacher background materials, extension activities, a guide to additional resources and a student reading list are included *ViewFinders Too*, is the new middle grades curriculum and is currently in pilot-testing. To learn more about this exciting set of activities, contact:

The Dunn Foundation

333 Strawberry Field Road Warwick, RI 02886 Phone: 401·941·3009 / Fax: 401·738-1535

E-Mail: dunnfndn@tiac.net

The Natural Inquirer

The **Natural Inquirer** is a quarterly magazine that was created so that scientists in the USDA Forest Service can share their research with middle school students.

Students will "meet the scientist," read about a specific research project, become a scientist by conducting a Discovery FACTivity, and be introduced to new vocabulary.

There is an on-line teachers guide and special teacher instructions for each issue. Each issue includes correlations to the National Science Education Standards.

The Natural Inquirer comes in both Spanish and English. The USDA Forest Service will provide hard copies to educators at no cost, but you have to act before the issue is "sold out." Copies of back issues are provided as pdf files on their web site. For more information, go to The USDA Forest Service at www.fs.fed.us or The Natural Inquirer at www.naturalinquirer.usda.gov.

Junior Duck Stamp Program

Junior Duck stamp contestants (K-12) must research a species of North American waterfowl and its habitat and depict their selected species in an artistic medium. Junior Duck curriculum guides, developed to teach environmental science and habitat conservation, are available online or by calling (703)358-2000. Submission Deadline: March 15, 2003. Submission guidelines are available online at http://duckstamps.fws.gov.

The Leopold Education Project

http://www.lep.org/

The Leopold Education Project (LEP) is an innovative, interdisciplinary, critical thinking, conservation and environmental education curriculum based on the classic writings of the renowned conservationist, Aldo Leopold. The Leopold Education Project teaches the public about humanity's ties to the natural environment in the effort to conserve and protect the earth's natural resources.

m

What's in Your Water?

http://www.earthday.net/goals/clean_water.stm

Mark the Year of Clean Water and the 30th anniversary of the Clean Water Act with a real hands-on project that can make a difference in your community. Join thousands of students, families, and community groups as volunteer monitors and test the quality of your local water resources. Participation is easy and fun. Your results can be submitted to the National Clean Water Data Collection Site. You'll be able to compare the health of your water with those from hundreds of sites around the nation.

New Horizons for Learning

http://www.newhorizons.org

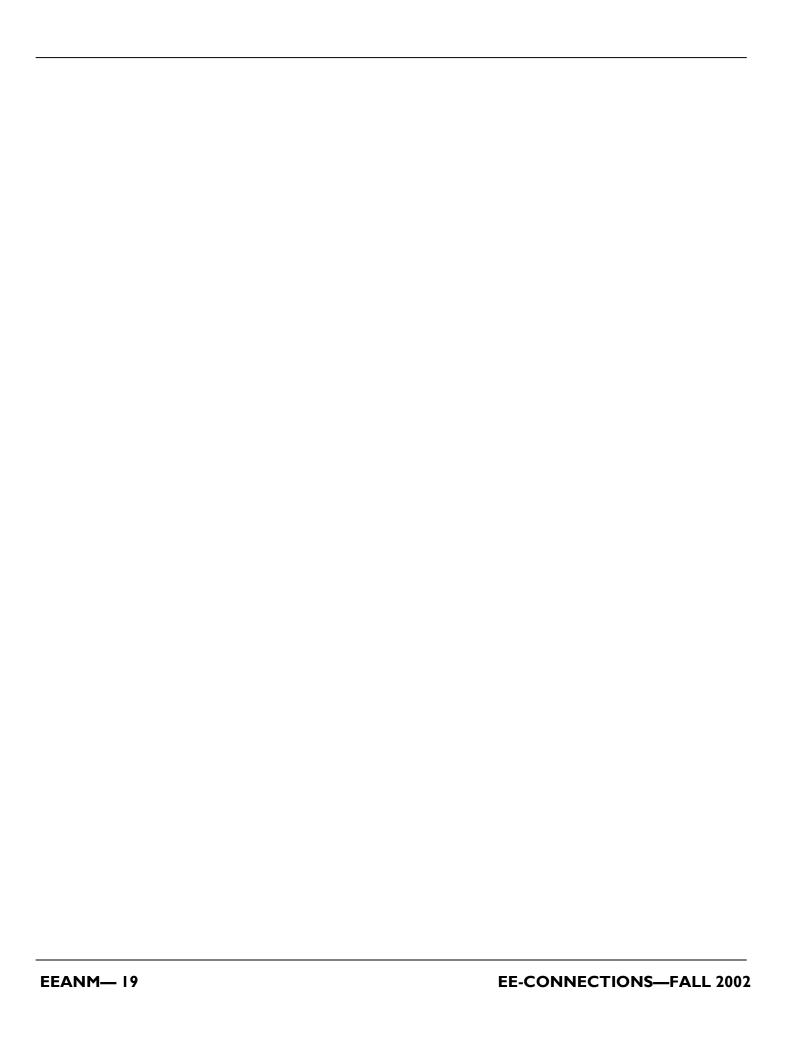
New Horizons for Learning is an international network of people, programs, and products dedicated to successful, innovative learning. As such, this organization acts as a catalyst for positive change in education; seeks out, synthesizes, and communicates relevant research and information; supports an expanded vision of learning that identifies and fosters the fullest development of human capabilities; works to implement proven strategies for learning at every age and ability level; and builds support for comprehensive lifespan learning communities. Click on "Teaching and Learning Strategies" to access resources for environmental education, service learning, multicultural education, cooperative learning and more.

The ZERI Foundation

http://www.zeri.org

The ZERI Foundation is a non-profit organization with a multinational network of academics, businesspeople, bureaucrats, and educators finding creative solutions to the most pressing challenges of our times regarding water, food, housing, health care, energy and jobs. Dedicated to putting theory into action, the ZERI Foundation "fast tracks" the implementation of Zero Emissions research (theory) into sustainable development and education projects (action) around the world.





MEMBERSHIP APPLICATION

Name:	Affiliation:		
Year-round Mailing Address:			
City/Town:		State:	Zip Code:
Phones: W. ()	I. ()	Fax ()
Email Address:			Web Address:
CHECK ONE OF THE FO)LL(OWIN	NG MEMBERSHIP TYPES
Limited Income/Student Membership\$ Individual Membership\$ Organizational Membership\$ (Allows for 1 voting member and 2 general member of voting member Name of voting member Names of 2 additional newsletter recipients	325.00 350.00	EEA givin inter	asionally, other EE organizations ask for the ANM mailing list. The EEANM Board is selective in ng out the list to organizations with similar rests or mission(s). Check here if you object to your name being given to other organizations. The EEANM Membership Directory: Briefly ude, in ten words or less, how you are involved in EE
ENVIRONMENTAL EDUCATI ASSOCIATION OF NEW MEX P.O. Box 36958, Albuquerque, NM 87176-	ICC)	Pre-Sort Standard U.S. Postage PAID Permit No. 388 Albuquerque, NM
			ΓARY ISSUE NM. Join Today!
Editor: STEPHANIE DOBBIE All submissions and changes of address to: stephaniestansbury@earthlink.net			

Layout by STEPHANIE DOBBIE Printed by MONOLITH PRINTING