



NEWSLETTER

Pajarito Environmental Education Center

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President's Message

Michael G. Smith

The interior landscape responds to the character and subtlety of an exterior landscape; the shape of the individual mind is affected by land as it is by genes.

- Barry Lopez, "Landscape and Narrative"

In mid-January I spent two days at the Bosque del Apache National Wildlife Refuge south of Socorro. The refuge, along nine miles of the Rio Grande, was established in the 1930's. Since then extensive habitat has been developed that provides ideal winter habitat for many birds. A well-maintained series of roads and trails permits visitors to explore much of the habitat. Viewing platforms are easily accessible.

A count of birds at the Refuge on January 3rd revealed 525 Canadian Geese, 26,700 Snow Geese, 30,500 ducks, 13,640 Sandhill Cranes, and 6 Bald Eagles. Hundreds of other species have also been observed at the Refuge.

Like most things, patience and perseverance are key ingredients to viewing success at the Bosque. One has to be quiet and move slowly. A good technique is to bring a chair, sit, and wait for the birds to come to you. They will, too. Binoculars and a thorough bird guide are necessary.

Adherence to Nature's schedule is advised. Dawn and dusk are excellent times for viewing. The refuge explodes in movement,

sound, and color. Particularly humbling is the arrival of the snow geese from the surrounding farms before dawn. Approximately a half hour before sunrise they come in undulating waves by the hundreds and settle on the water. At the moment the sun peeks above the eastern hills they lift off, flying tens of feet over your head. The air vibrates with the beat of their wings; their cries will deafen your thoughts. Then, silence as you stand transformed.

A major factor in the success of the Bosque is its volunteer organization, Friends of the Bosque del Apache NWR (www.friendsofthebosque.org). They own and operate the visitor center, raise funds, volunteer, produce guides, and conduct tours and workshops. Because of their efforts the Bosque is world-renowned.

While at the refuge talking to several of its Friends, I could not help but think of PEEC and its missions of environmental education and exploration of the Jemez landscapes. We have entered an exciting phase of growth,

Table of Contents

President's Message, p. 1
Ecosystem Education, p. 2
Earth Day April 26 Plans, p. 3
New Web Site, p. 4
Vulture Watch 2003, p. 4
First Annual PEECnic, p. 4
Bird Count in Cerro Grande Burn Area, p. 5
Mountain School Science Night, p. 5
Natural History Calendar, p. 6
Poetry Contest for Grades 1-8, p. 7

and now mail to over 100 addresses, both individuals and families. Our Web site (www.nmpeec.org) is up and running. We are organizing Los Alamos Earth Day activities for the week of April 20-27, another membership drive, and a survey to gauge the community's desire for a nature center. A business plan is being developed, as are summer butterfly field trips and counts.

Now, more than ever, PEEC needs to tap into its membership base. To help with any of the aforementioned activities, please contact me (jbird@rt66.com, 661-8405). I promise to put you to work!

Ecosystem Education at the Research Park

Michele Altherr

Last November my class of fifth graders participated in a four-day study of ecosystems that was offered by the Randall Davey Audubon Center of Santa Fe. They sent an environmental educator named Hope to teach the unit. Hope was visiting from England and completing her internship at the Center. She loved working with children and my students enjoyed her many wonderful activities.

On the first day of the unit, Hope showed my students how to use jeweler loops to closely observe their immediate outdoor environment and to record their observations in a journal. Next she helped the kids learn about sorting and classifying through a game in which one team sorted themselves by a single attribute while the other team watched and tried to guess the attribute.

Then the children applied their newly learned skills. First, they made observations about schoolyard sites and recorded them like clues to an investigation. Then they discussed these clues and made sense of them by sorting and categorizing them as they had in the game. Soon they saw that there was a pattern and that every habitat contained consumers, producers, and decomposers. The idea of relationships within habitats was developed through further game-like activities. Groups of kids created

human pyramids to help them understand the structure of decomposers, producers, and consumers within a habitat, and yarn webs that nurtured their understanding of the connectedness of all life.

The most exciting experience of the four-day study was a field trip to do outdoor field work. Hope and I chose the recently restored Los Alamos Research Park pond as our study site. It turned out to be a great location for study due to the variety of habitats it offered (pond/vernal pool, forest, wetland, grassland). The children studied three sites and noted their differences and similarities. Additionally, Hope brought along a variety of bird nests and skulls so that the kids could draw conclusions as to which bird or animal they thought each belonged to. The day held one more special experience for the children, although not related to ecosystems. Brad Burke, owner of Hot Rocks Cafe, served our whole group complimentary hot cocoa and chocolate chip cookies. Imagine the big chocolate-covered smiles on the faces of the kids! Thank you, Brad.

We were the first school group to use the pond for educational purposes. Kevin Holsapple, whose LACDC established the Research Park, hopes eventually to develop a curriculum for educational use of this unique local site.

The pond is essentially a vernal pool that dries up for parts of the year. Vernal pools are especially important to amphibians in the arid southwest. Some amphibians migrate 50 to 100 meters to lay their eggs in the same pool every year. Bats and other wildlife have also been attracted to the pool. Each of the site's natural assets holds educational possibilities. Children have an innate love of animals and my students truly appreciated the fact that the pond provided much needed habitat for our local wildlife. On behalf of my students, I would like to thank Kevin Holsapple and the many volunteers who helped to restore this beautiful little corner of the world.

The Audubon course was paid for by a LANL Foundation grant awarded to PEEC to bring environmental education to the students of northern New Mexico.

Earth Day April 26: "A Sense of Place"

A PEEC committee is working on plans to celebrate Earth Day during the week of April 20 to 27, with the focus on Saturday, April 26. Our theme this year is "A Sense of Place"--what do we know and cherish about the place we live?

Current plans are for hikes, films, a Farmers' Market, a poetry reading, green economics information, talks, and children's activities. We've had suggestions for hybrid car or solar house demonstrations--what would you or your organization like to see or sponsor? Let us know!

Contacts: Yvonne Keller (662-7915, alfonso@cybermesa.com), Becky Shankland (shankland@cybermesa.com, 672-9106), Michele Altherr (maltherr@cybermesa.com, 661-4237), and Laura Burrows (455-2703, laurapickle@earthlink.net).

**Comp. Plan Meetings January 25
(White Rock Methodist Church) and
February 1 (Fuller Lodge)**

These two public meetings will give citizens a chance to comment on the last draft of the Comprehensive Plan, which clearly supports the idea of having a nature center in Los Alamos.

Membership News

PEEC is planning a membership drive in association with Earth Day, which is our fiscal year for dues. We will be publishing a membership list in our next newsletter--if you prefer not to be listed, please let Michael Smith know at jbird@rt66.com or 661-8405.



PEEC board member Laura Burrows is a litterbug for America Recycles Day.

PEEC Expands Web Site

<http://www.peecnm.org>

Claudia Lewis

We have recently redesigned and expanded the PEEC Web site. This is a milestone for us because it gives us an easy way to communicate with the membership and to let others know what we are doing. We have included lots of information on who we are as an organization, our goals, and our programs. There are articles on forest ecology, birds, and flowers. You can access current and past newsletters. We also posted a reading list on flora, fauna, environmental stewardship, and other themes relevant to PEEC's mission.

Please take a look at the site and let us know what you think. If you have suggestions for improvement or if you have articles, photos, poetry, artwork, or something else you'd like to see posted, we will consider your input. Our thanks to Jane Burrows, our Web designer, for her good eye and hard work. Thanks go to student Eric Black, as well, for all his work on our first Web site, which got us up and rolling.

Join the 2003 Vulture Watch!

Last year's Los Alamos Vulture Watch reported several vultures early in March 2002. What will PEEC members see this year? Call Yvonne Keller (662-7915) to report time, place, and number.

Returning Turkey Vultures are one of the signs of spring. They are nearly unmatched in their seemingly effortless flight. As days lengthen and turn to spring, the increasing amount of sunshine produces rising thermals of air that these masters of flight use to find food. The Los Alamos breeding bird atlas says the median date (over 28 years) for the return of Turkey Vultures is March 31. Watch for this year's PEEC results in the next PEEC newsletter.



Keith Barras presents his architectural design.

First PEECnic Peeks at the Future

With a strange acronym like PEEC, it seemed inevitable that our annual meetings would take the form of PEECnics. The first annual PEECnic was held October 10 in the Betty Ehart Senior Center's spacious meeting room.

New officers and board of directors were elected as follows:

President: Michael Smith

Vice-president: Michele Altherr

Secretary: Tom Jervis

Treasurer: Gordon Spingler

Members-at-large: Laura Burrows, Hedy Dunn, Chick Keller, Claudia Lewis, Sarah Meyer, Dick Opsahl, Randy Ryti, and Becky Shankland.

Los Alamos architects Keith and Jeanette Barras presented their conceptual designs for the abandoned Pueblo Canyon Sewage Treatment Plant. The audience was excited at the prospect of turning various elements of that eyesore into an environmental education center with a central building, an outdoor open-seating lecture area, a wetland area for birds, an observation blind and nighttime observation deck, and utility and caretaker buildings. All these would reuse elements of the old treatment plant that still

exist. The PEEC board is pleased by the idea of recycling an ugly site into an area in harmony with nature. The Barras design accomplishes this task imaginatively and aesthetically.

We also gathered input from the PEECnickers about what they would like to see in a nature center--the list ranged from a Web cam wildlife observation station to sustainable building techniques.

A brainstorming session on future plans included expanding membership and giving PEEC information to other civic groups

Volunteers Needed for Cerro Grande Bird Work

Stephen Fettig and Michael Smith

The past century of wildfire suppression has resulted in dramatic changes across the landscape. Specifically, in ponderosa pine forests the density of trees and the volume of fire-prone fuels have increased dramatically. Today most fire management focuses on reducing fuel loads, with relatively little consideration given to the effects of fire severity or forest thinning on wildlife.

Scientists and environmental groups have suggested that fire suppression may be a threat to species that are post-fire specialists, including Olive-sided Flycatchers and Three-toed Woodpeckers. Our understanding of the ecological effects of fire patterns, however, is rudimentary at best, in part because of the scarcity of rigorous field studies that have evaluated the effects of fire on large burns with complex variations in elevation and topography.

In the aftermath of the Cerro Grande Fire, Dr. Natasha Kotliar and Sandy Haire of the United States Geological Survey began a project to examine how fire severity can alter the structure of bird and plant communities. As part of a larger project involving several burn areas across the western United States, they are using the variation of fire-severity in the Cerro Grande burn to examine the effects of fire at multiple spatial scales. Their results will improve our understanding of how fire management affects the bird populations in post-fire forests.

With changing national priorities,

budget cuts have hit the project. After two years, work in the Cerro Grande burn will end without volunteers to collect bird observations. PEEC is helping to keep the project active by seeking volunteers with some experience with birds.

If you are interested in following the recovery of the Cerro Grande Burn or if you are interested in putting your birding skills to work as a citizen scientist, consider volunteering for the project. Beginning birders are very welcome. Training in May will be provided to help beginning birders learn the sounds of the most common birds, as well as to learn how to collect the needed information. Volunteers will need to visit one or two places in the burn area twice during the summer to count all the birds seen or heard in a 10-minute period. Work will involve off-trail walking, so steady feet are required as well as an interest in watching and listening to birds. If you want to learn more about this project visit www.fort.usgs.gov/research/30001.asp.

If you are interested in volunteering, contact Michael Smith, 661-8405, jbird@Rt66.com, for details.

Mountain School Science Night

Michele Altherr

Along with other local science organizations, PEEC sponsored a hands-on science activity at Mountain Elementary School's "Science Night." The gym was packed with curious children and their equally curious parents.

The theme of PEEC's activity was "Nature Invented It First." We borrowed several microscopes so kids and parents could look closely at man-made inventions and their counterparts from nature. A digital microscope was an especially engaging tool; the kids could easily manipulate it and view the images on a laptop screen. With it kids could compare velcro and barbed seed burrs, fingerprints and running shoe treads, rose stems and barbed wire, feathers and zippers. It was a wonderful evening devoted to children and the sciences.

Natural History Calendar

February 8-9: Audubon trip to Bosque del Apache Refuge to see winter birds. Meet at Refuge Headquarters at 12:30 on Saturday or 8:00 Sunday. Call leader Joe Healy at 690-5150

February 18: Sierra Club talk, "State Land Stewardship," by Patrick Lyons, newly elected State Land Commissioner, Santa Fe Unitarian Church, 107 W. Barcelona, 6 p.m.

February 14-17: Great Backyard Bird Count (backyard, anywhere outdoors). Report observations to www.birdcourse.org/gbbc.

February 19: Native Plant Society slide show on SW Native Plants by Dr. Norman Hunter, Evens Science Building, Room 122, at St. John's College, 7:30 p.m.

February 22: Rosy Finch field trip at Taos Ski Basin. Meet at Taos Visitor Center (Hwy. 68 and Hwy. 64 intersection) at 7:15 a.m. Call Audubon leader Karen Epperson, 505-758-7035

February 23: Sierra Club strenuous hike to Diablo Canyon, Sagebrush Flats, rim of White Rock Canyon, led by Norbert Sperlich (474-4354).

February 27: 7th symposium of biological research in the Jemez Mountains. Free and open to the public. College of Santa Fe. Call Stephen Fettig, 672-3861 ext. 546, for information.

March - Many species of owls are early nesters. Great Horned Owls can have young in their nests in March and April, sometimes earlier. Listening for Great Horned Owls after dark is the best way to know they are around. Their nests can be very difficult to find.

March 1: Sierra Club moderate hike to Eagle Traps, Bandelier National Monument, led by Stephen Markowitz (505-797-5833, stepdov@hotmail.com).

March 12: Raptor Identification, slides by Art Arenholz, Audubon Society program at Unitarian Church, 107 W. Barcelona, Santa Fe, 7:30 p.m.

March 15: Audubon field trip to Maxwell NWR to see waterfowl and raptors. Meet at Refuge at 9 a.m. Leader: Dave Cleary (505-375-2971).

March 19: Native Plant Society talk on Plant Identification via Computerized Interactive Keys by Dr. Una Smith, Evens Science Building, Room 122, St. John's College, 7:30 p.m.

March 29: Sierra Club strenuous hike on Red Dot/Blue Dot trail loop, White Rock, led by Dan Rusthoi (690-8967).

March 30: Sierra Club easy hike to Diablo Canyon near Santa Fe, led by Victor Atyas (438-9434).

April: Early April is the peak of the hawk migration in New Mexico. Migration is the time of the year when forest hawks such as Cooper's Hawk can easily be seen flying over trees and houses. Consider visiting the Hawk Migration count site in the Sandia Mountains.

April 9: Historical Perspective to Forest Habitat Conditions, Audubon talk by Ben Kuykendall, Santa Fe Unitarian Church, 107 W. Barcelona, 7:30 p.m.

April 19: Audubon trip to Cochiti Lake for spring migrants, led by Gail Szpatura (471-4496).

April 20-27: Earth Day activities in Los Alamos. Main events April 26-27.

PEEC Board of Directors

Michael Smith, President

Tom Jarvis, Secretary

Laura Burrows

Chick Keller

Sarah Meyer

Randy Ryt

Michele Altherr, Vice-President

Gordon Spingler, Treasurer

Hedy Dunn

Claudia Lewis

Dick Opsahl

Becky Shankland

Newsletter edited by Becky Shankland; photo scanning by Laura Burrows; computer assault by Tom Shankland.

Please give this form to a young person in grades 1 through 8 and encourage participation!

2003 International Migratory Bird Day Poetry Anthology

Call for Poems

Sponsored by PEEC, the Pajarito Environmental Education Center

America's National Parks provide important habitat for a wide variety of birds that migrate along north-south flyways. PEEC, Hawks Aloft, and five New Mexico national parks--Bandelier, Aztec, Fort Union, Capulin Volcano, and Pecos--have joined together to educate young people about migratory birds of the southwest. Now young people have the opportunity to share their thoughts and feelings about our migratory birds in the form of poetry. The top 75 poems will be collected and published in an anthology. The top three poems in each category will receive special recognition in the front of the anthology. A copy of the anthology will be sent to each published author and to each of the national parks. All published authors will receive a certificate of recognition.

We encourage you to be free and creative in your poetry. How can you capture your unique impressions of these amazing birds? Do you wonder where they come from and where they go? What are their colors, their songs, their wings like? Do you have a special bird that you like? What is their habitat like? What are they like when they fly, eat, dive or nest? What do you wonder when you watch these birds? If you were a migratory bird, what would you be thinking? What are their secrets? How do birds add music, motion, and color to our world? Migrating birds spend the summer in our parks and the winter in Central America--what do you find remarkable about this? How do migratory birds connect us with faraway places and people? How do you feel when a migrating bird returns in the spring? What other ideas do you have that will enliven the hearts and minds of others who read your poem?

If you would like more poetry ideas or more information on migratory birds, visit the Web site <<http://birds.fws.gov/imbd/materials.html>>. This form and other information are also at the PEEC Web site: <<http://www.peecnm.org>>.

Submission Rules

- ◇ Categories: grades 1-3; grades 4-6; grades 7-9, and grades 10-12.
- ◇ Deadline: entries must be postmarked by March 31, 2003
- ◇ Only one entry per person
- ◇ Must be limited to 21 lines or less
- ◇ Must be typed
- ◇ On the back include the author's name, home address, phone number, e-mail (optional), name of school, school address, teacher, grade, and whether you participated in the Hawks Aloft field trip and which park you visited.
- ◇ Winners will be announced on International Migratory Bird Day, May 10, 2003.
- ◇ Please keep a copy of your entry since we cannot return them.
- ◇ Mail to Michele Altherr, Pajarito Environmental Education Center, 1900 Camino Redondo, Los Alamos, NM 87544.

If you have questions, please contact Becky Shankland (672-9106, shankland@cybermesa.com) or Michele Altherr (661-4237, maltherr@cybermesa.com).

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60 Barranca Road
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FIRST CLASS