

## Nature Notes

Pajarito
Environmental
Education
Center

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PEEC, PO Box 547 Los Alamos, NM 87544 505-662-0460 PajaritoEEC.org Location 3540 Orange St. Open T-F, 12-4, Saturday, 10-1

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## President's Message

By Randy Ryti

As we inaugurate "Nature Notes" as our new newsletter name, it is an appropriate time to contemplate how we take note of the natural world around us. Sometimes we pick the time and place to consider our connection to the natural world. We might enroll in a class at PEEC or simply take an outing to enjoy the Valles Caldera in winter. Other times we are forced to take note of nature when it confronts us during our daily routines.

One night in the fall my usual drive home was instantly transformed by a close encounter with wildlife. As I was driving west, another motorist approached from the east, and unfortunately a deer bounded in front of both vehicles. The deer seemed to bounce off of the fender of the other vehicle and disappear into the darkness. I stopped my car and walked back to check on the other driver and the deer. The car had a large dent in the front fender; the driver and his passenger were startled but otherwise unharmed. There was no sign of the deer in the darkness.

The next day I looked for evidence of an injured deer in the vicinity. Seeing no evidence, I hoped that it suffered no long-term consequences of its trauma.

More recently, I was driving

a friend who spotted a pair of deer about a block away. She asked, "Why are there deer standing in your street?" The animals were a safe distance away with no chance of an unfortunate incident. The question went unanswered then, but it has made me wonder about the responsibilities associated with living in a community intertwined with nature.

PEEC has certainly played a role in educating residents about injured wildlife and organizations that help rehabilitate animals. Fur and Feathers, the Wildlife Center in Espanola, and the Santa Fe Raptor Center are three organizations that come immediately to mind. Clearly



we care about tangible impacts on wildlife and perhaps even more about effects on one or a few individuals. It is more difficult to become informed and take action to mitigate

impacts on more distant and abstract populations. However, we can do much to make note of nature because nature will make note of us for a long time to come.

#### Thanks for Our New Name!

Fifteen people submitted a wide variety of names to the newsletter contest; the winning name was chosen by Hedy Dunn. Also, thanks to our recent editor, Jen Witt. She's moved to Gallup for a new job.

### Earth Day 2007 Alert

By Peter O'Rourke

PEEC's Earth Day, to be held April 21-22, is an annual educational community weekend. The main event this year will be an Earth Day Festival at the PEEC center on April 21.

Earth Day 2007 will also promote environmentally friendly products sold by downtown merchants. Buyers of these products can enter a lottery for valuable prizes to be given away at a drawing at the Earth Day Festival.

We plan an evening event at Fuller Lodge and a PEEC benefit dinner. We will also collaborate on Earth Day events sponsored by LANL, the County, and Bandelier. All events will be promoted with banners, posters, flyers, Web sites, and an attractive newspaper tabloid.

Planning meetings of the Earth Day Committee are held every Thursday at 4 p.m. at PEEC. To suggest ideas or help on this committee, please contact Peter O'Rourke (663-0524 or cfddor@swcp.com).

## <u>Family Nature Science</u> Who Ate the Goodies?

By Michele Altherr

Many wild animals are secretive, nocturnal, or scarce. So it is often easier to see evidence of animal activity than it is to actually see the animal itself. On a hike outside you might observe nibbled twigs, burrow holes, or scat left on a rock. These signs are often confusing except to the most experienced sleuth. But this is not the case with animal tracks, which are easily seen and can often be matched to the animal that left them.

Figuring out which animal left tracks is a nature detective job, one that kids love. With so much snow and mud in Los Alamos right now, it is an especially good time to get kids on the case. So try this activity with your children.

In the evening set out some "goodies" on a flat surface. This could be bits of dog food, fruit, peanut butter on bread, or table scraps. If you do this where there is no snow or mud, try sprinkling flour on the ground around the goodies. Go to bed and in the morning when you wake up, go

outside and see if your goodies have been eaten. If so, you'll see tracks. Try drawing (or photographing) and measuring the tracks as well as counting the number of toes and measuring the distance between prints. Many animal tracking guides can be consulted once you've collected your evidence. With good detective work, the case of who ate the goodies will be solved.

Starting a collection of plaster casts is also fun and informative. First, cut a half-gallon milk carton into four horizontal sections. The spout section is not needed. The bottom section should be tall enough to mix the plaster. The two other upper sections, each about 2" wide, can be used for containment moulds around each track. Next, mix the plaster and gently pour it over the track within the mould walls. Let it harden. When it is finished, write on the bottom of the cast the date, location, and, if known, kind of animal that made the track. By starting a collection and comparing their tracks, one can learn much about the animals that roam our area. As always, have fun doing nature science with your family.

### Expanded 2007 Nature Odyssey Is Underway

Bob Dryja and the Nature Odyssey Committee announce plans for PEEC's Nature Odyssey summer program. Several expansions are planned—in number of weeks, ages of children, and length of day.

The inquiry-based exploration program will expand to three weeks. Participants can enroll in one, two, or three weeks, which are planned for the following dates:

- Valles Caldera National Preserve: June 4-8
- Bandelier National Monument: June 11-15
- Espanola Wildlife Center: June 18-22

The programs will be for two age groups, late elementary (grades 4-6) and middle school (7-8). The program will run from 9 to 4 each day, with day care at PEEC for an hour before and after the program at an additional charge. Interested parents should leave their names with Diane Noveroske at 662-0460 so that PEEC can contact you when details are finalized.

#### Winter Wednesdays

### Tigers, Fossils, Chimps, Stars

PEEC has organized talks on a variety of topics to cheer your winter evenings. Families will enjoy these Wednesday free talks at 7 p.m.

February 7: Hari Viswanathan, "Tigers of India"
February 28: Earl Hoffman, "Mysteries of Northern New Mexico Fossils"
March 21: Ray Powell, "Roots and Shoots: the Work of the Jane Goodall Institute"
[Tentative date April 4: Steve Becker, Starlab Astronomy]

#### Nature Book Club Meeting

The next meeting of the PEEC Nature Book Club will feature *A Mile in Her Boots: Women Who Work in the Wild*, a collection of stories edited by Jennifer Bove. One of the stories is by Los Alamos native Jennifer Esterl, Ronnie Moss's daughter, now living in Alaska. We will meet Tuesday, January 30 at Laura Patterson's home, 2972 Woodland Rd., at 5:30 p.m. Newcomers are always welcome. Contact Mickey Marsee Snyder (mmarsee1@msn.com).

### Founding Board Member Resigns

Michele Altherr, one of the founders of PEEC seven years ago and the principal organizer of most of our exhibits and programs, announced her resignation from the board in January. Happily, she promises to stay with some activities off-board: the Web site, Kinnikinnick Club, family science articles for the newsletter, and Earth Day advice.

Michele's energy, enthusiasm, and competence will be sorely missed--she is virtually irreplaceable. The best way to honor her would be to step up to the plate and volunteer to take on some part of her work! PEEC has lots of committees (programs, Nature Odyssey, Kinnikinnick Club, exhibits, publicity, Web site, brochures/fliers) that eagerly welcome members.

And watch for the announcement of a celebration honoring Michele's work.

#### Mommy/Daddy and Me

### Marine Discovery Series

Even here in land-locked New Mexico, kids can explore the wonders of the ocean at PEEC, Friday mornings from February 23 through March 16 from 9:30-11 a.m.

These classes will present ocean lore while introducing young children to shapes, numbers, letters, and textures. Marine biology teacher Diana McPherson will teach this Mommy and Me Marine Discovery Series—and of course Daddy and Me teams are welcome as well.

Each class will have stories, music, and activities for ages 0 through 5. Children can dance like an octopus, make ocean animals with cut-out shapes, count ocean creatures, and feel a sticky anemone. There will be a special "trip" during our fourth (last) class.

The four classes are Ocean Shapes, Ocean Numbers, Ocean Alphabet, and Ocean Textures. Participants are welcome to sign up for individual classes or for the series.

Register for the underwater fun at PEEC: 3540 Orange St., center@PajaritoEEC.org, or 662-0460. PEEC members are \$8 per class and non-members are \$10 per class. Additional children are \$5. Parents are free.

### Tracking 101 Workshop February 3

Tracker Timothy Lord will lead a tracking adventure in this year's great snowfall near PEEC. Possible sightings might be rabbit, squirrel, raven, songbirds, deer, raccoon. Come learn who shares our woodlands!

The workshop is February 3, 1-3 p.m., starting indoors at PEEC but spending most of the time outdoors. Pre-registration is required at PEEC, 3540 Orange St., 662-0460, or www.PajaritoEEC.org. The cost is \$10 for non-members, \$8 for members.

### Science Fair January 27

PEEC will be giving eight awards this year. Natali Steinberg, Chick Keller, and Bob Dryja are PEEC judges. Further information is available by visiting laschools.net.

### Family Festival March 3

This annual event sponsored by Family Strengths Network is Saturday, March 3 at Fuller Lodge. PEEC will have an interactive exhibit called "Nature Invented It First," plus fliers and handouts about our programs. Natali Steinberg and Felicia Orth would love volunteers to help for an hour or two. Contact PEEC at 662-0460 or center@pajaritoeec.org. And be sure to take your own family to the fun.

# PEEC Seeking to Hire Teachers for Kids

PEEC is now hiring experienced and creative teachers who enjoy developing and implementing educational nature programs for kids. Programs may be designed for after school or weekends. They can be offered one at a time, once a week, or once a month. PEEC believes that exploring nature with young people nurtures life-long connections. If this is your vision too, contact Diane Noveroske at 662-0460 or center@pajaritoeec.org.

### PEECnic Elects New Board

On Saturday, October 21, PEEC held its fifth annual "PEECnic" or annual membership meeting, for electing officers and directors and providing a venue for members to become informed about PEEC programs and goals.

Board members set up refreshments, a membership table, our wonderful collection of scrapbooks by Yvonne Keller, a strange wormplus-parasites display under the microscope, and Mark and Linda Wells' mushroom CD. The Santa Fe Raptor Center brought their educational birds, including red-tail hawk, merlin, and flammulated owl. A slide show titled "PEECnic 2006: What's Been Happening at the Center" ran continuously in the meeting room. To kick off socializing, a terrific cake walk was organized by Emily Powell and the LAHS Environmental Club.

Nominations chair Jody Benson proposed the slate of candidates: Esta Lee Albright, Felicia Orth, Emily Powell, Natali Steinberg were all newly elected to the board. Continuing to serve their terms on the board are Bob Dryja, Hedy Dunn (treasurer), Chick Keller (vice-president), Peter O'Rourke, Randy Ryti (president), Becky Shankland (secretary), and Selvi Viswanathan.

The program continued with teacher recognitions. Certificates, blank journals, and notes of appreciation went to all our teachers who have worked with kids for the past 18 months: Margaret Blewett, Jennifer Moss, Bob Dryja, Andrea Spence, Kati Steinberg, Beth Coop, Rachel Cowan, Cindy O'Hara, Diana McPherson, and Mike Penovich. The PEEC board honored Randy with a card and plant.

Pablo Herrera and Marvin Torrez, our Central American Park Flight interns, entertained the audience with a talk titled "Cultures, Climates, and Critters—Stories about Guatemala and Nicaragua." Carol Beidleman, national director of Park Flight, spoke. We concluded with a DVD titled "No Child Left Indoors: Nature Adventures with PEEC" by David Lewis of Two Moons Production featuring the Park Flight students and biologists in action.



The LAHS Environmental Club created a Mother Nature Scarecrow that won the Harvest award for the downtown contest last fall and then came to rest at PEEC. (Photo by Becky Shankland)

### Feeding the Local Birds

By Diane Noveroske

Many people enjoy attracting birds to their yards. Birds are interesting and beautiful to watch. Over 100 species of North American birds will be attracted to the birdseed, suet, fruit, and nectar that you provide. However, with feeding birds comes responsibility. Take care not to endanger the birds that you feed.

Birds need protection from domestic animals such as cats and dogs. A fence around the feeding area to slow down predators and some cover (shrubs, trees, or piles of branches) within the fence perimeter can help protect birds. If your feeders are near house windows, use decals to discourage birds from flying into the glass. A net over the windows can help prevent injuries.

Feeding birds can promote the spread of avian diseases, so feeders should be placed several feet apart to prevent overcrowding of birds in one area. Water baths should always be kept clean. Diseases such as trichomoniasis can spread among Mourning Doves and Band-tailed Pigeons due partly to dirty feeders and unclean water. Other diseases such as salmonellas, aspergillosis, and avian pox can easily be transmitted at birdfeeders and birdbaths. To clean feeders and baths, immerse them in a nine to one water-bleach solution one to two times a month, then rinse thoroughly. Rake up spilled seed and uneaten hulls. Change water in birdbaths daily.

There are different types of feeders, so make sure a suitable type of seed is offered. Use separate feeders for sunflower, millet, nyier, and cracked corn. Here in the Southwest only three types of seeds are really needed for the majority of feeder birds: white millet, black-oil sunflower seed, and cracked corn. Low-price commercial birdseed mix is a waste of grain and money because it often contains milo, wheat, and oats, which most birds will discard. These grains get scattered and accumulate under the feeders. attracting rodents. Black-oil sunflower seed will be eaten by House Finches, Cassin's Finches, Evening Grosbeaks, Pine Grosbeaks, Red-Crossbills, Mountain Chickadees, Juniper Titmice, Pine Siskins, nuthatches, and jays. White millet is the seed of preference for our most common winter feeder bird, the Dark-eyed

Junco. Millet attracts House Sparrows, Canyon Towhees, quail, doves and blackbirds. Unfortunately, it is also a seed of choice for Brown-headed Cowbirds. Feed medium-sized cracked corn to ground-feeding birds. It will attract Mourning Doves, White-winged Doves, jays, sparrows, juncos, towhees, and others. Cracked corn should be offered on feeding tables or in watertight hoppers since it readily soaks up moisture and will rot.

To expand your food choices, offer peanuts to jays and suet in the winter months to insecteating birds. In the warmer months, a mixture of peanut butter and corn meal will invite many suet-eating birds, such as woodpeckers, wrens, bushtits, and titmice. To attract robins, bluebirds, orioles, and tanagers, provide orange slices on wooden skewers and raisins that were soaked overnight in water on a table feeder. Western Bluebirds will enjoy mealworms.

In addition to food, fresh water should always be offered, especially here in the dry Southwest. Adding a drip or misting fountain to your water baths will entice birds, since they are attracted to the sound of dripping water. Offering water will also attract rarer migrants that are not interested your feeders.

Have fun and enjoy the show.

Diane Noveroske, PEEC's administrative assistant, has done research on bird diets in Northern New Mexico.

### PEEC and Bandelier To Be Honored by Schools

At their School Board meeting on February 13, the Los Alamos Public Schools will recognize PEEC's Randy Ryti and Bandelier's Darlene Koontz for their Park Flight classroom and field trip program using NM science standards

The audience will see a 5-minute version of David Lewis's wonderful DVD called "No Child Left Indoors: Nature Adventures with PEEC," which shows the children and scientists in the field. Copies of the 20-minute version, featuring Los Alamos kids, are for sale for \$15 at PEEC.

# Powering Los Alamos through the 21<sup>ST</sup> Century:

### Making the Energy City Energy Independent

By R. B. Gibson, for EILA, Energy Independent Los Alamos

- Envision Los Alamos living on locally produced clean, renewable energy.
- Imagine Los Alamos setting an example for the nation and world by using no significant hydrocarbon fossil fuels (natural gas, coalproduced electricity, or petroleum-based motor vehicle fuels) and adding no significant carbon dioxide or other pollutant gasses to the atmosphere.
- Imagine energy-related research and development providing a free-market based component to the local economy separate from LANL but comparable in technical skills and economic return.

A local ad hoc group, Energy Independent Los Alamos (EILA), has for two years been investigating the potential for Los Alamos to become independent of externally supplied non-renewable hydrocarbon-based energy. It is a challenge worthy of Los Alamos.

Energy independence would take several decades to accomplish. Wiser use of existing energy supplies is the first, large step. New buildings would need to utilize the natural energy of sunlight for much of their space and water heating. Most existing buildings can be made more efficient. Transportation vehicles, woefully wasteful of energy, are likely to be improved. The current gas-electric hybrids are a first stage.

Our largest renewable primary energy source is sunlight. In addition to providing heat, it can be converted to electricity. Costs remain high, but are becoming more competitive. Storage remains an issue. An expanded network of hydroelectric generators at existing dams could support much of the year-round base load. Other sources are more speculative.

Techniques and products for producing clean energy and using it more efficiently are fertile areas for innovation that the world needs and the intellectual and economic diversification that Los Alamos needs.

Formal community commitment is developing. Last 16 August, the Board of Public Utilities endorsed pursuit of energy independence and recommended that the County Council adopt it as a community goal. The Council was briefed on the concept on 28 November and will consider it as part of its next review and update of strategic goals and objectives.

Practical implementation will likely be a combined effort of volunteer expertise from the community and professional staff from the County Department of Public Utilities, which is very enthusiastic about the initiative. Principal EILA participants to date have included (alphabetically): Gale Zander Barlow, Kathy Campbell, Skip Dunn, Robert Gibson, David Griggs, Ben Luce, Don Machen, Robert "Buck" Monday, Robert Shafer, Becky Shankland, Thurman Talley, Kathy Taylor, and Robert Wells. Others willing to contribute to this exciting initiative are invited to contact Robert Gibson at rgibson@swcp.com or 662-3159.

#### Nature in the News

Compiled by Becky Shankland

#### Aplomado Falcons Introduced in NM

Eleven Aplomado Falcons, a species that had vanished from New Mexico, have been released recently on the Armendaris Ranch in a program called Safe Harbor that is designed to keep them out of trouble with Endangered Species listing. 1,257 have been released over the past decade in Texas. To read about the controversy over their release, see *High Country News* (11.13.06).

#### **Bark Beetles Demystified**

An article by Scott Hoffman Black relates how the bark beetle functions to keep forests healthy. They serve to prune and thin trees, enhancing the health of surviving trees, recycle nutrients in dead plants, feed and create habitat for insect-eating or snag-nesting birds. They are a positive force in most forests, but in mismanaged forests where fire or diversity has been suppressed, they can become pests. (from *Native Plant Society Bulletin*)

#### **Bighorn Sheep in Taos**

The Rio Grande Gorge is the new home for 24 bighorn sheep moved there from Wheeler Peak. Moved in September, the herd seems to be adapting well, not surprisingly since they flourished here in earlier times.

#### **Great Backyard Bird Count Coming!**

February 16-19 is the tenth annual Great Backyard Bird Count. Audubon sponsors this project to engage citizens in collecting data that will be useful to scientists.

Participation is free and open to everyone of any skill level. As you enter data, you will learn what others have discovered. You only need to count in your own backyard—but school or other groups may choose to count in a schoolyard or natural park.

To learn more, visit the GBBC Web site: www.audubon.org/gbbc.

#### Mushrooms to the Rescue

Paul Stamets' book *Mycelium Running:* How Mushrooms Can Help Save the World describes how inoculating logged forests and wood chips with mushroom spores can help heal and replenish the forest, instead of burning slash piles. He even makes chain saw oil that contains the spores! (book available in Mesa Library)

#### Pale Male and Lola, Junior and Charlotte

The famous red-tail hawk pair named Pale Male and Lola laid three eggs this year, but they failed to hatch. In June they were analyzed, but no reason for the failure (such as toxic chemicals) was found.

However, the Trump Parc pair, Junior and Charlotte, who raised two chicks in 2005, were successful in laying again in 2006 (*New York Times*, 4.21.06). The NYC Audubon Web site doesn't tell whether these eggs hatched.

#### **Bluebirds Love the Mess**

A charming article by Anne Raver in the *New York Times* (1.4.2007) describes the return of bluebirds, pileated woodpeckers, and Carolina wrens to her yard. She learned that all her unpruned, messy stacks of brush make the perfect habitat for wildlife. Tidiness is *not* next to godliness here.

#### Thanks, New and Renewing Members

This list covers activity since June 2006; please let us know of any errors, so our records will be accurate!

**Living Lightly:** Bettie & Jeff Bedell: Liz Bennett: Joyce & George Carlson; Corry & David Clinton; Robert & Wilma Cowan; Maddie & George Evans; Joanna Gardner; Glen & Sue Graves; David Griggs; Mary Pat & Rich Kraemer; Anne Perkins; June Ryti; Steve Girrens & Sharon Stover; Laura Swartz; Stephanie Sydoriak; Mark & Linda Wells General: Bob & Kathy Anderson; Jerawan Armstrong: Tevis Baier: Robert & Susan Benjamin: David & Faye Brown; Heather & Brady Burke; Maggie Charsley; Tom Sandford & Ruth Demuth; Leslie Dendy; John & Marilyn Dienes; Linda Doolen; Stephen Fettig; Helen & Henry Finney; Steve Foltyn; Bernard & Dawn Foy; Jennifer & Guy Gaffney; Robert & Lori Gibson; Leon & Rosalie Heller; Jeri & Phillip Hertzman; Chris Judson; Shari & Richard Kelley; Edwina Leib & Carl Maggiore; Doris Lodwig; Betsy & Scott Lucido; Don Mahoney; Cas & Rod Mason; Michael McKay; Kok Heong & Mike McNaughton; Joel & Ronalie Moss; Laura Patterson; Shelby Redondo; Kim Selvage; Meena Sachdeva & Khalil Spencer; Marty Peale & Kim Straus; Gerry & Georgia Strickfaden; Cathy & Ian Strong; Pamela Sutton; Sue Thompson; Jeannette & Terry Wallace; Tom Fairbanks & Beth West; Steve Weller & Tori West; John & Renate Zinn

Penstemon: Scott & Carolyn Briles; Katherine Campbell: George & Chris Chandler; David & Kristine Coblentz; Robert Dryja; Skip & Hedy Dunn; Roy Greiner; John Hopkins; Brian & Elaine Jacobs; Mat & Andrea Johansen; Gordon & Elizabeth Keating; Morgan & Richard Light; Craig & June Martin; Jessie & Chris Ross; Miriam Oudejans & William Steckle; Thurman & Gaye Talley; Steve & Sandy Tobin; Nara Tsiagkouris; Brad & Rozelle Wright

Sunflower: Grace Boncella; James & Carolyn Bossert; Marie Caldwell; Dave & Linn Collins; Dave Dombrowski; Dave & Anne Fox; John & Deborah Gill; Dorothy & Donald Hoard; Jeffrey Howell; Tom & Carlyn Jervis; Evan & Diane Noveroske; Dick & Judy Opsahl; Felicia Orth; Joan & Stan Primak; Ann & Robert Shafer; Jane Sherwood; Robert & Ann Wells; Marilyn & David Yeamans

Wild Iris: Ilse & Rainer Bleck; Janet & Richard Gerwin

Skyrocket Gilia: Chick & Yvonne Keller Wood Lily/Non-Profit: Helen & George Cowan Non-Profit: Los Alamos Sustainable Energy Network; Summit Garden Club

Membership in PEEC
Members receive Nature Notes, electronic updates (PEEC This Week), library check-out privileges, discounts on classes and gift shop.

General Membership \$35
Living Lightly \$20
Penstemon Donor \$60  Benefits of membership plus t-shirt or canvas shopping bag.
Sunflower Donor \$100 Benefits above plus an additional t-shirt or canvas shopping bag.
Wild Iris Donor \$250 Benefits above plus Muench coffee table book.
Skyrocket Gilia Donor \$500 We will contact you to determine how to recognize this generous level of donation.
Wood Lily Donor \$1000 We will contact you to determine how to recognize this generous level of donation.

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