



# Nature Notes

Volume 12, Number 1 Winter 2013  
Your Nature Center in Los Alamos

## The Call of the Mild, the Call of the Wild

by Sue Watts

*Note: "Gentle Walks" is the name for a series PEEC events for people who want to walk easy trails, often move slowly and perhaps stop, sometimes silently. These are designed to give the optimum time to enjoy, see, learn and connect with nature; all three are prime objectives of PEEC activities.*

The Gentle Walkers were stepping out of character as time pushed them up a hill. They had abandoned their usual sauntering gait and were moving quickly. They'd been sidetracked by the call of the wild.

The walk had started, as usual, with a meandering saunter along an old road Craig Martin called the Knife Edge Trail. Located on NM Highway 4 about three and a half miles south of its intersection with Pajarito Road, it fit within our two-mile round trip limit. One of the members had a pressing time commitment, so we had agreed to walk down the shallow sloping steps of solidified ash flow tuff for half the time and then turn back. In my head, I modified that to the old canyoneer's formula: one third of the time down and two thirds of the time up. We would have been fine if I had stuck to that, but Craig's book had promised a view that was one of "the best on the entire Pajarito Plateau." I kept stretching the turnaround time thinking that the view might be around the next juniper tree.

Then, too, there were the serendipities that waylaid us.

During one pause in our stops, I mentioned the fact that we were walking through the polka-dotted landscape of a piñon-juniper community. The two types of trees exist side-by-widely-spaced side on a thin layer of soft soil. Tufts of dried grasses, finished with their job of seeding, wavered in the gentle wind. None of the seed gathering birds flew.

Someone asked how to tell the piñons from the junipers. Since I like to give people distinguishing characteristics and to let them discover the trees for themselves, I said that the needles of the piñons were sharply pointed and usually clustered into a bundle of two, while juniper's leaves were scaly and blunt on the ends.

We soon discovered that we were standing in the middle of a juniper forest. There were no piñons in evidence. We talked about the pine beetle plague that had raged through several years before, reducing most piñons to skeletal candelabras.

And then I found them – cuddled beneath the drooping branches of a near-by juniper was a patch of vegetation. Springing confidently up from the patch of green was a small evergreen with sharply pointed needles. Thanks to rodents, piñon jays, and Clark's nutcrackers, who cache and forget the seeds nestled in the cones, a small tree was asserting its right to life. Under the sheltering care of the juniper nurse tree, it had a chance to survive. Soon we discovered more and more "baby" trees. A whole generation of

*(Continued on page 2)*

(continued from page 1) seedlings was making the case for the importance of diversity. When one type of tree faltered, the other apparently provided a safe place for it to recover. We wandered on, finding little trees under nearly every sheltering juniper.

All that took time. We moved onward, heading for that point of land with the outstanding view. When a glance at my watch showed me that we really HAD to turn around and that, no, I couldn't go a few more steps to see what was around THAT tree, I called a halt. We spread out for a few moments of silent watching. The view of the Sangres across the canyon of the Rio Grande and the bedded layered cliffs of the Cerros del Rio volcanic field made for some spectacular wallpaper.

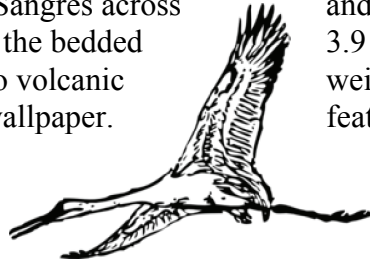
With reluctance, we headed upward. About midway through the uphill trudge, nature did it again.

A whisper of aerial autumnal sound stopped me, and I shushed the gentle conversation. I looked eastward and there they were, the sandhill cranes of autumn heading southward. The thin streamers of tiny specks were hard to locate, but the verbal confetti of sound helped. None of the walkers had ever seen them. We stood and watched and listened as one group disappeared to the south. I described how they would use the rising thermals of White Rock Canyon to lift them to greater heights for the next leg of their journey. I told how the strings would break apart and how the birds, with much discussion and chatter, would spiral upward, then reassemble into their formations and resume their southward push toward a rendezvous with the bosques of the middle Rio Grande. Another batch moved into view. About the time they disappeared to the south, our group heard the sound and found the next band. We could have stayed for hours, but time nudged us again.

Once again, we climbed the slope of tuff steps. The sound of one of the great migrations of our land lingered in our ears. I knew the Gentle Walkers had found another way to connect with the Pajarito Plateau. Next November, they'd be out there ...listening for the sound of autumn ... the call of the wild.

Note: The sandhill crane migration passes over Los Alamos County and the Rio Grande in spring and fall. Southbound, they have come from nesting in the Rocky Mountain region and are headed along the Middle Rio Grande Valley from Albuquerque to Bosque del Apache National Wildlife Refuge (NWR). Smaller numbers winter in southwestern New Mexico and Las Vegas NWR. We can expect to see the greater sandhill (*Grus canadensis tabida*), which is the largest of the sandhill crane subspecies.

Sandhill cranes have heavy bodies and long necks and legs. The average greater sandhill stands up to 3.9 feet and has a wingspan of 6.6 feet. They can weigh 15 pounds. Colored gray with gray nape feathers, adults have red skin on their crowns. ✧



Source: Clker.com

## Connecting with Nature

Connecting with nature has become a theme in PEEC's current process of planning and forming new mission and vision statements. Seeking ways local folks connect with nature, PEEC board member Sue Watts conducted a 24-hour online "flash poll." Response was good and input superb. Here is an unknown respondent's experience with our local nature in winter (see quotation below) and Sue's imagery that it inspired.

"I skied to Canada Bonita to view a full moon and was lucky enough to startle a bull elk who sailed lightly over a fence."

Can you sense it?

The wonder of it all:

- the brilliant moon shouldering aside our usual bright view of the Milky Way,
- stars glittering in the midnight blue sky,
- the white spread of snow,
- the dark cones of evergreens cradling pillows of snow,
- the crisp of cold air,
- the silence,

And the grace:

- dark shape, a full rack of antlers held aloft,
- the power than can lift such a massive mammal over a fence with ease. ✧

# Climbing Trees

by Terry Foxx

Our youngest daughter always wanted a tree to climb in our backyard. She felt somewhat deprived. However, we did a lot of hiking, so being outdoors was very natural to us. When we would be at a place where there was a climbable tree, there she would be. I always smiled because I didn't see the importance of climbing a tree. It was just a hazard where one could fall and break a bone. As a parent I breathed a sigh of relief that we didn't have a climbing tree.

Recently, I was on a Southwest Airlines flight, and in their *Sky Magazine*, I read an article about the importance of tree climbing. I was fascinated. I unfortunately did not keep the magazine, but I searched the internet and found similar information. So here are some of the benefits of tree climbing.

1. Tree climbing promotes an increase in self-confidence. As a child masters something new and challenging, the child gains confidence. He is proud of himself.
2. Climbing is excellent for gross motor development. It's great exercise. It builds strength. It is good for arms and legs. It improves balance and coordination.
3. It is fantastic for building critical thinking skills, such as learning which branches are safe and deciding where to put hands and feet.
4. It exercises imagination. Where better to imagine you are on the top of the world?
5. It delivers happiness. It's fun!
6. Trees are alive and natural. Tree climbing brings one closer to nature. There is peace and relaxation in the branches of a tree.
7. Senses come alive. Touch (roughness of bark) and sound (breeze blowing through a tree canopy) are intensified.

I am writing this article not because PEEC or I advocate tree climbing, but because we encourage outdoor play. I never had thought about how my daughter could have indeed benefitted from a climbable tree. Ironically, our grandchildren climbed lots of trees – one is an airplane pilot,

another a glider pilot. Heights don't intimidate them as they do me.

Safety is always foremost in outdoor play. Learning how to do an activity safely is paramount, be it hiking, tree climbing, caving, or rock climbing. Let's encourage our children to leave the TV, iPad and other electronic devices for a while and get outdoors. It has a multitude of benefits. Check [www.PajaritoEEC.org](http://www.PajaritoEEC.org) and see an interesting variety of opportunities to learn, get outside, and enjoy nature.



*Photo by Terry Foxx. Erin Foxx-Chavez and Kerri Frazier (who coveted a tree to climb) in a large piñon tree.*

Note: The article by Sue Watts and this photo by Terry Foxx mention piñon pine trees that are important in our local piñon-juniper woodlands. Older piñon pines may be 35 feet tall, with a short trunk and rough bark. As they grow, their branches twist out in a pyramid shape and are good climbing challenges. In our piñon-juniper habitat, at 5500 to 7000 feet elevation, trees have some interesting adaptations. Learn more from the article on the next page. ⚙

To see the photo above and receive every issue of *Nature Notes* in color, go to the PEEC web site: <http://pajaritoeec.org/publications/newsletter.php>. Members can sign up to receive each issue by e-mail. See it and save it for longtime reading pleasure.

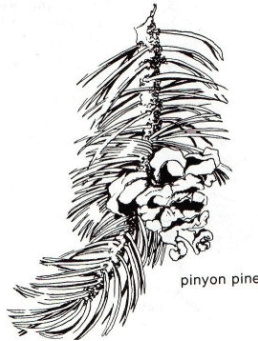


# Our Piñon-Juniper Community

## Cones and Berries

(excerpts from Dorothy Hoard's *Los Alamos Outdoors*, chosen by Sue Watts)

The pinyon is a true pine, *Pinus edulis*. Its needles grow in bundles of two. ...The seeds are... high in protein... a tree begins to bear when it is about 75 years old. Certain climatic conditions are necessary for the cones to set. Chief among these is a lavish amount of moisture. The cones take an additional three years to produce mature seeds. Pinyons are monoecious; the male and female flowers are on the same plant but occur in separate structures. On any given tree, female cones appear in all stages of maturity along the branches. The pinkish-orange, papery structures at the tips of the branches are male cones....By contrast, juniper is an aggressive invader of over-grazed land...the one-seed juniper of the Southwest, *Juniperus monosperma*, is dioecious: it has male and female flowers on separate trees. Male trees become rust-colored in the spring and release great clouds of pollen on a windy day. Female trees develop fruit about the size of blueberries that turns a bluish color when mature. The berries are allegedly edible, provided one has a liking for a strong turpentine aftertaste. They mellow somewhat (but not much) after a frost.



## Seed Dispersal

(from *Field Guide to Wildlife Habitats of the Western United States*, with notes by Sue Watts)

Piñon and juniper trees have amazing adaptations for allowing animals in the piñon-juniper zone to disperse their seeds and fruit. The following points tell us about birds and mammals, as well as the trees.

○ The trees pack the seed with fuel/high calories, which allows a rootlet growing from a seed to reach moisture quickly. Piñons are 60% fat; a juniper berry has 315 calories.

○ Piñon cones grow tilted upward, making it easy for birds to reach seeds.

○ Piñon cone scales are spineless and short. It's easy (and comfy) for birds to get seeds.

○ Piñon seeds have a streamlined shape that fits easily into a bird's throat pouch. For example, Clark's nutcracker stores up to 90 seeds in a pouch in front of and below the tongue; piñon jays have an expandable esophagus which can hold 56 seeds at a time.

○ Juniper fruits stay on the tree all winter and provide food for wildlife.

○ An animal's digestive system removes the protective

covering from juniper berries, allowing them to germinate easily. Those that fall to the ground have a poor germination rate. Writer Sue Watts muses about berries dispersing widely, "My assumption is that the juniper wants the berries dispersed; they don't want the kidlets to hang around the old homeplace."

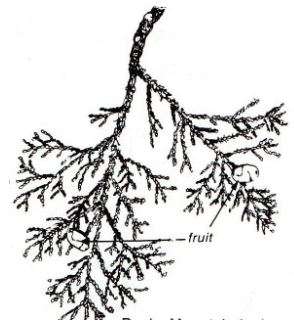
○ Layers of a piñon-juniper forest provide vertical diversity so animals can nest and feed without competition.

○ Mammals help disperse seeds with their droppings and by caching. These include Abert's squirrel, piñon mice, woodrats, rock squirrels, chipmunks, and black bears.

○ Mammals use the area for shelter (warmth and hiding).

○ Piñons produce snags (dead standing trees) for trunk feeders. Branches break easily, allowing fungi and insects to destroy the interior.

○ Junipers produce hard snags, which are good for branch nesters.



(Drawings are by Dorothy Hoard from *Flowering Plants of the Southwestern Woodlands*, by Teralene S. Foxx and Dorothy Hoard. Otowi Crossing Press, out of print) ✨

## Local Poet Writes for PEEC

The Community Tech Knowledge Foundation has a yearly "Heart and Soul" poetry contest for non-profit organizations, with a top prize of \$10,000. The requirements are that the poem should be four to eight- lines in length and should reflect the mission of the organization.

We posted this opportunity on PEEC's Facebook page, asking if anyone would create an entry for the contest. PEEC member and poet Jane Lin volunteered. All of us were completely enchanted by the poem Jane wrote. "Connections" is a perfect reflection of PEEC's mission to get people outdoors and connect them to the wonders of our local nature. Thanks, Jane!

### Connections

by Jane Lin

A gaggle of children, journals in hand, cluster  
like loosely held electrons vibrating.  
Look! A red-tailed hawk rises from a  
ponderosa.  
Gentle walk past piñons beneath the nurse tree.  
Young and old wide-eyed at the moon as big as  
our hands,  
the backyard earth wild at our feet. ✧

## New PEEC Interest Group: Wild Plants

The success of PEECbirders interest group is very gratifying, and now there is another interest group to join. It's about identifying, finding, and understanding local wild plants -- and getting help from local experts, such as Chick Keller and Dorothy Hoard. Members can post photographs for help and admiration. The group is the creation of local botanist and ecologist Terry Foxx. Over the years we've enjoyed her wildflower walks, books, talks and advice with benefit and joy. Log on to the web site, [www.PajaritoEEC.org](http://www.PajaritoEEC.org), then click on Outreach and pull down to Wild Plants Interest

Group. Or go to [http://pajaritoeec.org/outreach/wild\\_plants.php](http://pajaritoeec.org/outreach/wild_plants.php). You'll find instructions for joining. ✧

## The Masked Hunter (*Reduvius personatus*)

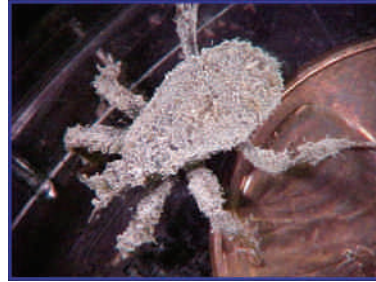


Photo by Chick Keller

Found in a hidden corner of a local house, this frightening bug turned out to be a nymph form of *Reduvius* with its accumulation of dust, lint, sand or such as its camouflage. Predatory at only 17 mm long, it

eats a variety of small arthropods, such as woodlice, lacewings, earwigs, bed bugs, and swallow bugs. Predatory adults use the long rostrum (the projection on the front of the head) to inject a lethal saliva that liquefies the insides of the prey, which are then sucked out. The saliva contains enzymes that predigest the tissues they swallow. This process is referred to as extra-oral digestion, or EOD. The saliva is commonly effective at killing prey substantially larger than the bug itself. It has a painful bite but does not feed on blood and does not transmit diseases.

Perhaps its nickname, "bed bug hunter," is more desirable than its appearance.

Sources: BugGuidebugguide.net; Wikipedia ✧

## Great Backyard Bird Count 2013

The Great Backyard Bird Count is a popular experience for all who enjoy seeing birds in their yards. This year it is Feb. 15-18. Go to the web site [www.birdsource.org/gbbc](http://www.birdsource.org/gbbc) for instructions and an interesting history of the count. ✧

A reminder about PEEC This Week: our weekly newsletter is available to anyone with an e-mail account. It always includes news about PEEC activities for the coming week and dates of future programs, plus news about other local nature events.  
Just send a message to [Webmaster@PajaritoEEC.org](mailto:Webmaster@PajaritoEEC.org).  
And, watch for information about Earth Day, April 20 !

## Looking to the Future

by Terry Foxx, President of the Board of Directors

At PEEC we start the year 2013 with a sense of accomplishment and hope for the future. PEEC has been in existence for approximately 12 years. Until September of 2012, the day-to-day operations were primarily run by a dedicated and enthusiastic group of volunteers. But in September we hired Katherine (Katie) Watson to be our Executive Director to run the day-to-day operations. The Board can now concentrate on reviewing our past and looking to our future.

We are at a milestone. After 12 years it is time to determine if our core values, vision, and mission are the same as when PEEC was formed, to evaluate where we have been as we move into the future. In the summer of 2012, we received a grant to do a Museum Assessment Program as part of this evaluation. Katie and board members filled out an extensive workbook about our programs and operations. Then a Peer Reviewer was sent to visit and report his opinion on our successes and vulnerabilities.

Our reviewer was Rich Patterson of the Indian Creek Nature Center in Cedar Rapids, Iowa. His first statement was, "You are doing a great job. Mazel Tov!" Considering the maturity (only 12 years) of the organization, we are doing "quite well." We have great community support as evidenced by the generous contributions to our Annual Fund Drive. We have lots of people engaged in volunteer work, which is our strongest asset.

Rich was excited about our progress and provided us with his ideas for improvement, many of which we had already initiated. He gave many suggestions of how to make our organization a *community treasure* as we move into the future.

Those core values and vision that the founders expressed are still at the heart of our organization: nature, education, and community involvement. We appreciate all the support the community has given us over the past twelve years. As we move into the future, our goal is to provide a place of excitement, a place of solitude, a place of learning, and a place where we can treasure the immensity and beauty of the mesas, mountains, and canyons where we live. ✨

## Science Fair Awards by PEEC

For the county science fair each year, projects concerning nature are evaluated by a group of PEEC members, resulting in several awards. This year PEEC gave three individual awards each at the elementary and junior high school levels, plus one elementary class award.

Elementary:

Rebecca Brug: "Leaf Decay"

Nathan McCabe: "Bee Sense"

Nathan Taylor: "Los Conchas Fire Soil Sampling"

Mrs. White's second grade class: "Dirt and Cover"

Junior High:

Ben Houghteling: "Los Alamos Radioactive!?"

Xavier McTeigue: "Finch Fledging: The Next Generation"

Josh Strevell: "Modeling the Impact of Climate Change on Population and Agriculture" ✨

**Nature Notes** is the quarterly newsletter of the Pajarito Environmental Education Center,  
Los Alamos, New Mexico 87544

**Board of Directors:** Terry Foxx, *President*; Felicia Orth, *Vice-Pres.*; Sue Watts, *Secretary*; Nancy Arendt, *Treasurer*; Becky Shankland, Chick Keller, Michele Altherr, Robert Dryja, Selvi Viswanathan, Jennifer Macke, Mary Carol Williams, Siobhan Niklasson, Dave Yeamans, Karla Sartor, JoAnn Lysne.

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From the Executive Director,

Katherine Watson

Gratitude. The past year has given those of us at PEEC so many reasons to be grateful. Our wonderful corps of volunteers is the first of these reasons. We are so lucky to have our tireless board members, our weekly center volunteers, those who respond to occasional e-mails for help, and those who lead programs, give talks, and teach classes. In 2012 we had 117 people volunteer about 7,000 hours of time, along with their skills and expertise. They are our backbone. We couldn't manage without them.

We're grateful for our members and donors. Your financial generosity was crucial this year. If you're reading this, it's because you are a PEEC member. We rely on your annual membership support. In addition, many of you, members and non-members, support PEEC with donations. PEEC ended the year with 328 members and 110 individual donations. You provide a large percentage of our income and show how strongly the community supports our programs and our organization.

Members, donors, and volunteers make our mission happen—they connect people with nature. I was reminded of this at a recent class, *The Underground Life of the Forest* (taught by a volunteer and supported by your financial contributions). As two young girls looked in the microscope to see gopher teeth, cricket gizzards, and all sorts of fascinating samples, one said, "When can we go out into the forest and look for this stuff?" All of us working together inspire people to go out in the forest and look at stuff!



This quarter we'll offer more great programs to inspire you go out in the forest and look. We'll have exotic bird talks with beautiful photographs, gardening and fruit tree programs, a cloudspotting class, some great films at the Reel Deal, and plenty of the hikes and outings that you love, including some historical hikes and a trip to Alabaster Cave. Please see the included program flyer for all the details.

We're also grateful to our many partners in the community, who work with us to put on excellent events and programs like *The Underground of Enchantment* exhibit (Los Alamos County Library), Re-Art (Fuller Lodge Art Center, the Art Council, The Los Alamos Cooperative Market, County Environmental Services), Earth Day (many festival sponsors and booth operators) and our fantastic Summer Outdoor Adventure Programs (the Valles Caldera National Preserve). Partnerships are a wonderful way to bring you high-quality programs that celebrate the nature of the Pajarito Plateau.

Finally, we are so grateful to live in this beautiful community, with trails at every back door, breathtaking vistas, and an abundance of wildlife to observe and learn about. Los Alamos is uniquely situated in a fantastic location for nature lovers, and for that we are truly grateful. ☀

## Summer Adventure Programs

PEEC offers four exciting outdoor science explorations filled with adventures found nowhere else in the world. Each week is a chance to make new friends, explore wild lands, meet scientists in the field and try out some of their techniques. Keep watching *PEEC This Week* or call the nature center at 662-0460 for registration information coming soon.

**June 6-9 Adults and kids 12 or older,** Medicine Hawk's Summer Survival Basics

**June 10-14 Grades 4-6,** Nature Odyssey: Wet 'n Wild Along the Rio Grande

**June 17-21 Grades 7-8,** Living Earth Adventure Program: From the Rio Grande to the Valles

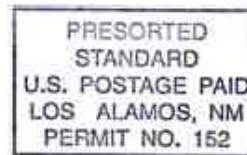
**June 24-28 Grades 4-6,** Nature Odyssey: Super Sleuths in the Valles Caldera ☀

### What's Your Preference?

PEEC's 2012 annual report will list all donors and members. If you do not wish to have your name included, please email [director@pajaritoeec.org](mailto:director@pajaritoeec.org).

Thanks!

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	<b>General Membership</b>	<b>\$35</b>
	<b>Living Lightly</b>	<b>\$20</b>
	<b>Penstemon</b>	<b>\$60</b>
	<b>Sunflower</b>	<b>\$100</b>
	<b>Wild Iris Donor</b>	<b>\$250</b>
	<b>Skyrocket Gilia Donor</b>	<b>\$500</b>
	<b>Wood Lily Donor</b>	<b>\$1000</b>

	<b>Non-Profit Membership</b> <i>One newsletter plus PEEC This Week for up</i>	<b>\$75</b>
	<b>Corporate Membership</b> <i>One newsletter plus PEEC This Week for up to 3 organizational members.</i>	<b>\$100</b>

PEEC's Mission Statement:  
*We enrich people's lives by strengthening connections to our natural world.*

### Joining or Renewing Is Easy!

Fill out this form and mail it in with your check or go to the website [www.PajaritoEEC.org](http://www.PajaritoEEC.org). Do it today! Thank you.

Name(s): \_\_\_\_\_ Address: \_\_\_\_\_

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Subscribe this email address to PEEC This Week (circle): YES / NO / Already subscribed

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*Donations are tax-deductible.*

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