



IN MEMORIAM Bill Lane 1919—2010

On February 11, 2010, Bill and Jean Lane were at Edgewood County Park and Natural Preserve to participate in the groundbreaking ceremony of the Education Center that will bear their name.

On July 31, 2010, "Following a brief illness, Bill Lane, 90, died at Stanford Hospital lovingly surrounded by his family. He lived a spirited, active and generous life to the very end."

He will be remembered with such gratitude by all the Friends of Edgewood.

BIRD BRAINS—PART I

by Carolyn J. Strange

Scrub jays are not only persnickety, freshness-dating inventory managers who demonstrate foresight in menu planning, they're also deceitful thieves (apparently it takes one to suspect one). Other birds not only use tools, but also make and modify them. Some hold personal grudges. And one species has performed well on the mirror test of self-recognition, joining bottlenose dolphins, elephants, and apes.

Although Charles Darwin expected degrees of intelligence throughout the animal kingdom, for much of the last century scientists have thought of animals as something like furry, feathery, or finny machines operating under preset programs. Prodigious food caching and recovery feats, for example, were explained away as the result of built-in hiding-place rules, i.e., birds found their treasures simply because they looked for them in the sorts of places where they would likely stash things.

We now recognize such simplistic notions are...well...bird-brained thanks to researchers who have conducted painstaking and ingenious experiments to explore the workings of animal minds. In laboratory settings that more tightly control variables and allow better observation of behaviors, it has been shown that scrub jays not only know *where* they've hidden things, but *what* they've put where, and *when*. Given perishable and non-perishable food (grubs vs. nuts) to hide in ice-cube trays filled with sand or pebbles, the jays retrieved perishable snacks first, abandoned them about the time the snacks expired, and flexibly adjusted their timing according to changing spoilage conditions.

Jays, members of the crow family, also plan for breakfast. Researchers housed jays, one at a time, in two-room suites, some days confining them to one room, and other days to the other room. Food was readily available in one room, but in the other room, breakfast was always two hours late. Researchers then served pine nuts one evening, allowing the birds to eat and stash as much as they liked in either room. The birds chose to provision the room where they had been hungry in the mornings. Jays also seem to have a good grasp of the importance of a varied diet, and plan accordingly. For several mornings the researchers served peanuts in one room and kibble in the other. When the birds got the chance one evening to cache food in either room, they moved each food type to the room that lacked it, apparently planning to supply the missing alternative at a later meal.

Thievery is common among jays, who have a social hierarchy described as chimp like. They steal from underlings, and sometimes peers, but not from superiors, so they're wary of nearby jays. They shift their stashes if "spies" observe their caching activities, and birds who are themselves experienced pilferers seem to be most suspicious of others. In experiments with "hider birds" and "watcher

birds," hider birds caching in view of superiors or peers were more careful about where they stashed snacks than when the watcher birds were subordinates; they would choose the furthest hideaways, darkest corners, and quietest substrates (sand vs. pebbles). Later, when allowed to revisit in private, hiders shifted more treats to new hiding places if the watcher had been a superior. An experiment



Western Scrub Jay
(*Aphelocoma californica*)

with jays of similar rank, allowed the hider bird to stash treats in one tray while being spied upon by one watcher bird, and in another tray when a different bird watched.

When the hider bird later returned to the trays and found one of the same watcher birds again present, it focused on moving treats from the tray that was filled when that same bird had been watching before. So the hider bird knows not only who's watching, but also what the watcher bird knows.


Another bird tracks a different who's who.

Mockingbirds may all look the same to us, but they quickly learn to tell us apart well enough to hold a specific grudge, and surpass many of us by managing to avoid prejudice. In this short experiment, "intruder" college students were instructed to simply stand by an egg-filled mockingbird nest for 15 seconds, then touch it for 15 seconds, once a day. The resident mockingbirds grew increasingly ticked-off with this "aggressive loitering," and by the fourth day they would quickly sneak off their nests when their "intruders" approached and dive-bomb the nefarious students, sometimes drawing blood. However, the birds ignored innocent, non-intruder students who approached.

The magpie, a member of the crow family along with the jay, makes a different "Who? Me!" mental leap, becoming the first non-mammal recognized as demonstrating rudimentary self-recognition. In the classic mirror test, an animal is marked in such a way that the mark can be inspected or touched only by looking in the mirror. In initial encounters with the mirror, unmarked magpies moved back and forth in front of it, inspected it closely, and looked behind it. But when marked with bright red or yellow water-based paint on their black throat feathers, the birds used the mirrors to carefully examine the colorful spots, turning and tilting their heads at close range. In some trials they scratched off the marks with their feet. Hard-to-see black spots didn't attract much attention when the birds stood in front of the mirror, nor did colorful marks when there was no mirror in which to see them. It was a small study, and not all birds "passed" the test. (Neither can all Edgewood visitors manage to remain on designated trails, which doesn't diminish the accomplishment of those who do.) Self-recognition activity seems to gradually decline in chimps as they age, so one speculation is that the magpies who "failed" the test might have been older than the ones who "passed." 🐦

Picture Source: <http://www.flickr.com/photos/jessicafm/>
<http://www.sciencenews.org/search?search=scrub+jay>
<http://www.scientificamerican.com/article.cfm?id=one-world-many-minds>
<http://hgmnationalgeographic.com/2008/03/animal-minds/virginia-morell-text/>
<http://discovermagazine.com/2010/mar/01-who-you-callin-bird-brain>

Not only is Trevlyn Williams a docent at Edgewood and Ano Nuevo, she is also a remarkable painter. Many of her paintings are of the natural world, and of those, many are of Edgewood, two of which are on these pages. The black and white photos do not do them justice, but you can see them in color once we post the newsletter to the web (www.friendsofedgewood.org/newsletters/). You can also do yourself a favor and go to her website to see even more of her work: www.trevlynwilliams.com.

Extraordinary as Trevlyn's docenting and painting talents are, they pale in comparison to her generosity. This summer at an exhibit of her paintings at Palo Alto's Gallery House entitled Open Spaces, Trevlyn donated 10% of all sales to either Friends of Edgewood or to a fund supporting the open space featured in the painting. ~ ed. 



*North Sylan
Lupines
Watercolor
11" x 17"*



*Edgewood Silver Bush
Lupine Splendor
Watercolor
24" x 30"*

THE SIMPLE TRUTH IS THAT TRUTH IS NOT SIMPLE

by Anne Koletzke

“Do I contradict myself? Very well, then, I contradict myself, (I am large—I contain multitudes).’ Are you familiar with those words?”

“Of course, they’re by Walt Whitman.”

“Well technically yes, but he got them from us.”

“From the *owls*?!”

“You needn’t sound so shocked. We are renowned for our wisdom, you know.”

“No offense meant, I assure you. It’s just that when I received your invitation to stop by for a chat, it never occurred to me we’d begin with Walt Whitman.”

“There, you see?! That’s just that sort of narrow-minded thinking that prompted me to contact you.”

“Excuse me! I am *not* narrow-minded!”

“When it comes to owls you are. It’s not your fault, of course; no one taught you properly. But no matter, we’ll soon correct that. Let’s make a game of it, shall we? You tell me something you think is absolutely true about owls, and I will show you that it isn’t; that we owls, being a large and diverse group, are, as we told Walt, chock full of contradictions. Please begin.”

“OK, let’s start with something obvious—owls are very big birds.”

“Ha! True but not true. Some of us, like the Snowy Owl and the Great Horned Owl are indeed huge. But the Elf Owl and the many varieties of Pygmy-Owl—being barely larger than a sparrow at their smallest, and smaller than a starling at their largest—are tiny. Barn Owls such as myself are mid-size, about the same as a crow, and the Western Screech Owl is only the size of a small pigeon. Next ‘truth’ please.”

“Owls live in trees.”

“Well, yes. But also no. How do you think we Barn Owls got our name? Certainly not from living in trees, although in the interest of full disclosure, I should say that we do often live in tree cavities, as well in the hollows of sandstone cliffs, and in a variety of manmade structures besides barns. And once, my mate and I even raised a family in an abandoned badger hole. (We are a very versatile owl, if I do say so myself.) The Great Horned Owl has also been known to shun trees for hollows in cliffs and dirt banks, and the Burrowing Owl chooses to live exclusively in an underground burrow, which, I must admit, the rest of us find a bit puzzling. Next.”

“OK, here’s something I know you can’t deny—owls are nocturnal.”

“Aha! What did I say?! Narrow minded! Narrow minded! Read my beak: not all owls are nocturnal. Take a look once again at our bizarre burrowing cousins; they nonchalantly stand around outside their burrows throughout the day (although they usually hunt during the evening and night). The Snowy Owl, our cousin in the far north who sometimes visits the Bay Area, and the Short-eared Owl hunt by day and by night, while the pygmy owls hunt almost exclusively by day. And the Great Horned Owl is most particular, preferring to hunt the first hour after sunset and the first hour before sunrise. Now, I believe that’s 3 points for me and 0 for you. Isn’t this fun?! Next item.”

“Geeze, I’m feeling plenty dumb enough already without you keeping score. But I’ve got you with this next one—owls have extraordinary eyesight.”

“Ah, now that is very true indeed. And yet it is not. You *see* (a little play on words there—sorry, couldn’t help myself), it all depends on what kind of eyesight you’re talking about. If you mean our exceptional ability to see small prey far below, as we fly or perch on a limb or telephone pole, then yes, our vision is as good as it gets (not that the hawks—a self-centered and egotistical group if ever there was one—would agree). But when it comes to looking at things close up, I’m afraid we owls could benefit from a good pair of reading glasses. At first *glance* (sorry, couldn’t help myself again), this would seem to be a great disadvantage, for although we catch prey with our talons, we kill with our beaks, usually with a blow to the neck or the skull, which requires accuracy at very close range—as does preening the head and neck of our mate or other family members, which we call *allopreening* and which is a most enjoyable pastime.”

“Well the last time I *looked* (sorry, couldn’t help myself either) reading glasses weren’t an option for owls, so what do you do?”

“We have a little rhyme we teach our owlets that describes exactly what we do: ‘Because we are wise, we close our eyes.’ Why do you look so astonished? It’s a very practical solution. We close our eyes and rely on our beak and the rictal bristles that surround it to *feel* our way to the spot we’re aiming for, be it to kill prey or nuzzle a loved one. When sight fails us, we use touch instead.

“I’m afraid that’s all for today, as it’s getting dark, and I am decidedly nocturnal. We’ll meet again, shall we? Good. Until then, I have 2 items of homework for you and your readers: 1) What is even more exceptional than our farsighted vision and why, especially Barn Owls? And 2) What do you call a group of owls, and why is this a bit of a trick question? Your readers may send their answers to you at newsletter-editor@friendsofedgewood.org, yes? Good. Until next time then.”



Barn Owl (*Tyto alba*)

THE HEALING PLANTS OF EDGEWOOD

Poison Oak: Demon or Healer?

by Mary Anne Leary

In our last issue of the *Edgewood Explorer* there was a lovely photo of Poison Oak—a plant that tends to cause a strong reaction, whether one interacts with it physically or merely by being in its presence. Even if an observer does not touch the plant, he may tend to recoil upon seeing it and keep his distance. This is because he knows the volatile oil of the plant can cause a very uncomfortable rash if he comes into contact with it. Great care must be taken to not even brush up against the plant (unless you are Ken Himes!) as your clothes and shoes can carry the oil, and, should they contact your skin, can give you the itchy skin rash same as the plant.

You also have to be extremely careful not to burn poison oak, such as when you are clearing brush from your property, as the volatile oil is carried in the smoke and can cause dangerous inflammation to the respiratory tract. Urushiol is the volatile component found in poison oak, and it is in all parts of the plant, so you can also get a rash if you touch even the leafless sticks during the winter months.

Should you discover you have come into contact with poison oak, it is recommended that you wash your skin with cool to lukewarm water (and your clothes and your shoes and your dog) as soon as possible to, hopefully, reduce or eliminate the possibility of getting the rash. Washing with Tecnu Oak-n-Ivy Cleaner® within six hours after exposure often proves effective. Another recommendation is to use alcohol wipes or gel cleanser immediately, if at all possible, to remove the oil from the skin.

What to do if you *do* get the irritating rash? Some advise you to use cool, wet compresses on the rash, or to soak in a cool bath using ground oatmeal, epsom salts, or baking soda. Calamine lotion can also help to quell the itching while the skin heals, and a homeopathic remedy called Rhus Tox can be used to calm the irritation and hasten the healing process. In actuality, the skin goes through its normal shedding process and eventually loses the top layer of skin where the irritation occurs. The rash is caused by your immune system trying to fight off the invasion of the oil into the bloodstream, and can last from two to three weeks.

In her book, *Flowering Plants of Edgewood Natural Preserve*, Toni Corelli describes Western Poison Oak (*Toxicodendron diversilobum*) as a plant native to the

Western United States that extends from British Columbia to the Baja California peninsula. The word, *Toxicodendron*, is derived from two Greek words meaning toxic tree. The plant flowers with a white-green colored inflorescence from March to May in woodland, chaparral, and disturbed areas, and reportedly not much above 5,000 feet in elevation. Many of Edgewood's docents often tell their fellow hikers "leaves of three, let it be," as poison oak usually grows in three leaflets on a single stem. It is the urushiol oil that causes the semi-glossy appearance of the green leaves in the spring. In late summer, cream-colored berries form, and in the fall, the leaves turn a beautiful scarlet color.

Have you ever noticed how poison oak leaves mimic the appearance of harmless plants? This can make trying to explain the various leaf and plant patterns of poison oak tricky. Poison oak also often adopts the growth pattern of the plants surrounding it: the plant can vary from being short ground cover, to medium to large shrubs, to vines that can wind their way up a tree, which certainly shows the versatility and adaptability of this plant to its environment.

Native Americans used the stems of the plant for basket making, and the black sap-like substance inside the stems for dyeing the baskets and other items. It is also thought they used the fresh leaves of California Mugwort (*Artemisia douglasiana*) to treat and prevent poison oak inflammation.



Western Poison Oak (*Toxicodendron diversilobum*)
Photo © Kathy Korbholz

So what medicine does the Poison Oak flower essence offer to us? Think of the reaction previously mentioned about Poison Oak—holding back, recoiling, and not wanting to interact with the plant. The flower essence remedy is useful for those who are afraid of having intimate contact with others. Such people tend to behave caustically, in hopes of creating a safe, emotional distance from others. The flower essence helps these people to feel more comfortable with their vulnerable feelings and the softer side of their nature. It is most useful for helping people to become comfortable with emotional openness with others and allowing for a more inclusive, rather than exclusive, personal boundary. So the next time you come upon a Poison Oak plant, don't feel afraid to visually embrace its beauty. You can then acknowledge the wise medicine that it has to offer us! ☺

http://arboretum.ucsc.edu/pdfs/ethnobotany_webversion.pdf
<http://waynesword.palomar.edu/ww0802.htm>
http://landscaping.about.com/od/weedsdiseases/apoison_oak.htm
http://www.dhow.com/how_2049_treat-poison-oak.html
 Kaminsky, Patricia and Richard Katz. *Flower Essence Repertory*
 Corelli, Toni. *Flowering Plants of Edgewood Natural Preserve*

ANNA'S HUMMINGBIRD

by Carol Hankermeyer

Come close, little emerald
shimmering in green glory,
flashing your ruby throat.
Pull me out of my shadow,
lure me into the wild fields
of new grasses until my feet
are soaked with last night's rain.
Make me chase you over the coastal hills
into the valley drenched in sun.
Show me scented blossoms of hummingbird sage
as you buzz from one to the next
to probe your needle beak
into their slender crimson trumpets.

Now dazzle me with your courting dance;
you rocket straight up into the sky
until you're lost from sight,
then power dive down, pulling out
just in time, all to woo your lady
with an acrobatic show to shame
the best stunt pilot. You're not troubled
by the thought of the freezing night approaching.
Your body will do what it knows
drop down to a near-death catatonic state,
reviving with the first shafts of morning light.

You're guided unerringly by the signs
of earth and air, by natural cycles
of day and night and seasons.
Your business is clear, uncomplicated
by 50 different possibilities.
It's insect-hawking in spring
sipping California fuchsia in fall,
collecting willow down and spider webs
to line the thimble-sized nest.
It's all laid out in patterns,
nothing to ponder or debate
with agonizing uncertainty.
Oh, if I could be so connected,
so free to know my life's simple course
by the tilting of the earth,
by the turning of the tide.



A male Anna's hummingbird © Anand Varma and Christopher J. Clark/UC Berkeley

FOR THE BIRDS

"I once had a sparrow alight upon my shoulder for a moment, while I was hoeing in a village garden, and I felt that I was more distinguished by that circumstance than I should have been by any epaulet I could have worn."

~ Henry David Thoreau



Drawings of a bird in flight by Leonardo da Vinci, from *The Life and Times of Leonardo*, by Liana Bortolon - http://commons.wikimedia.org/wiki/File:Leonardo_flight_of_bird.JPG

"Lying under an acacia tree [in East Africa] with the sounds of dawn around me, I realized . . . that the construction of an airplane, for instance, is simple when compared to the evolutionary achievement of a bird . . . I realized that if I had to choose, I would rather have birds than airplanes . . . Civilization is progress and aviation a boon only if life improves because of them . . . [T]he final answer will be given not by our amassment of knowledge, or by the discoveries of our science, or by the speed of our aircraft, but by the effect our civilized activities as a whole have upon the quality of our planet's life—the life of plants and animals as well as that of man."

~ Charles Lindbergh,
"Is Civilization Progress?"
Reader's Digest, July 1964

ANNUAL MEETING

by **Mary Wilson**

Please save Oct. 17 for our Annual General Meeting, the theme of which will be the new Bill and Jean Lane Education Center.

Still under construction, the building will be open just for us. You will be the first to get a behind-the-scenes look at how the interpretive exhibits are being designed and constructed. Guided tours will be conducted from 11:00 to noon, and if needed, from 2:00 to 2:30.

Because the Education Center is still an official construction site, please wear **SENSIBLE SHOES**, however unfashionable, i.e., those sporting a closed toe and a sturdy sole.

Lunch, deliciously catered as usual, will begin at noon, and will take place in the picnic grounds to the right of the restrooms in the Day Camp area.

After lunch, there will be a short program on the Education Center and "Making it Happen," followed by the presentation of the Best Friend Award and the annual election of 3 members to the Friends of Edgewood Board.

IMPORTANT NOTE ABOUT PARKING

Parking will be more limited than usual due to the construction, so please come early and **carpool, ride your bike**, or make those sensible shoes earn their keep and **walk in.** ☺

A MESSAGE FROM THE TREASURER

by **Peter Alley**

Recently you may have seen newspaper articles reporting that many local nonprofits are in danger of losing their tax-exempt status because they have not filed the proper forms with the IRS. I want to assure you that the Friends of Edgewood is not among them! We continue to be up-to-date on government filings, and are in no danger of losing our tax-exempt status.

You have entrusted us with judiciously using the money you generously provide through your annual dues and special contributions to support the needs of Edgewood. The Friends of Edgewood Executive Committee takes this responsibility very seriously, as we hold to our organizational vision of restoring and preserving Edgewood's ecosystem as an exceptional habitat for native plants and animals, and providing outstanding natural history programs so that visitors of all ages can appreciate, respect, support, and be inspired by Edgewood.

If you ever have questions about the finances of the Friends of Edgewood you can contact me at treasurer@friendsofedgewood.org.



MEMBERSHIP DUES

New or renewing members may clip and complete this section to pay tax-deductible annual membership dues. Please send your check, payable to Friends of Edgewood Natural Preserve, to the return address on the back of this panel. Renewing members can determine their membership expiration date by checking the six-digit code to the right of their name on the mailing label. For example, if the code is 06/2011, membership runs through June 2011.

Questions? Call (866) GO-EDGEWOOD or contact membership-coordinator@friendsofedgewood.org.

- \$10 Student/Retired** (includes quarterly newsletter)
- \$25 Friend** (newsletter)
- \$50 Advocate** (newsletter, set of 6 Edgewood photo greeting cards)
- \$75 Supporter** (newsletter plus choose one):
 - Set of 6 Edgewood photo greeting cards and 1-year subscription to *Bay Nature* magazine
 - Toni Corelli's *Flowering Plants of Edgewood Natural Preserve*
- \$100 Steward** or **\$250 Guardian** (newsletter, set of 6 Edgewood photo greeting cards, plus choose one):
 - 1-year subscription to *Bay Nature* magazine
 - Toni Corelli's *Flowering Plants of Edgewood Natural Preserve*.
- Please do not send any premiums.**
- I am endorsing a gift of _____.**

Please send ___ copies of *Common Native Wildflowers of Edgewood* (\$2.50), ___ copies of the *Edgewood Vascular Plant List* (\$3.00), ___ copies of the Apr-Jun 2004 *Bay Nature* magazine (\$6.00), ___ copies of *Flowering Plants of Edgewood Natural Preserve* (\$25.00). Includes tax, S&H. All items subject to availability.

I would like to participate in the following:

- | | |
|---|--|
| <input type="checkbox"/> Docent program | <input type="checkbox"/> Weed management |
| <input type="checkbox"/> GIS/GPS mapping | <input type="checkbox"/> Schools outreach |
| <input type="checkbox"/> Newsletter/web | <input type="checkbox"/> Habitat restoration |
| <input type="checkbox"/> Public relations | <input type="checkbox"/> Adopt-A-Highway |

Name

Address

City

State and Zip Code

Day Telephone

Evening Telephone

Email



"The mountains are calling and I must go."
~John Muir

Many thanks to Jim Rea, Friends of Edgewood docent, for sending in this, his favorite quotation, for the newsletter. ~ ed.



UPCOMING EVENTS

- ADOPT-A-HIGHWAY.** The next sessions will take place on 10/2, 11/7, & 12/4. To volunteer or get more information, contact Ken Seydel.
- ANNUAL MEETING.** Sunday, October 17, 2010 at Edgewood County Park & Preserve Picnic Area beginning at 11:00 a.m. See related article on page 7.
- SEPTEMBER 25.** National Public Lands Day and California Coastal Cleanup Day .



EDGEWOOD WEED WARRIORS

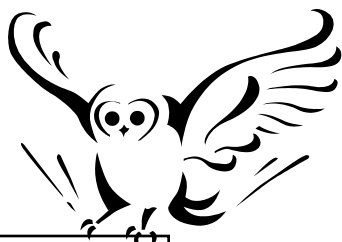
Want to become an Edgewood Weed Warrior? Go here to learn more: <http://edgewood.thinkersrus.net/>

The Edgewood Explorer is published quarterly by the Friends of Edgewood Natural Preserve, a nonprofit organization dedicated to preserving Edgewood for the human, plant, and animal generations to come. The newsletter is produced by Anne Koletzke with contributions from many Friends. For more information about the Friends of Edgewood, visit our web site at www.friendsofedgewood.org, mail us at PO Box 3422, Redwood City, CA 94064-3422, call or fax toll-free at (866) GO-EDGEWOOD (866-463-3439), or email info@friendsofedgewood.org.

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Dear Friends, You are cordially invited to the Annual General Meeting Sunday, Oct. 17 at 11:00 a.m. Details inside on page 7
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Mission Statement of The Friends of Edgewood
To protect and celebrate Edgewood as a unique treasure by promoting exemplary stewardship, and by reaching out with informative public programs
www.friendsofedgewood.org