

# Sedgwick Field Notes

Occasional Ramblings for Volunteers and Friends of the Sedgwick Reserve

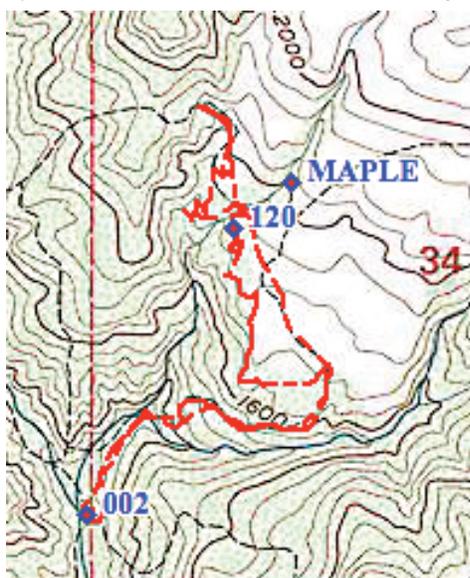
February 2006

## THE LOST BIG LEAF MAPLE IS FOUND!!

By Andy Lentz

Finally an intrepid group of hikers has succeeded in the quest for the infamous Big Leaf Maple. Third time is the charm, as Laura Baldwin, Carol Gibbens, Melinda Weymouth, and Susan and Andy Lentz finally located the elusive tree, using hints from Mike and an old collection sheet.

Previously, searchers had braved the upper reaches of the Reserve looking into every potential place for the tree, as can be seen from the meandering GPS track below. At one point, they were less than 400 feet from their goal.



GPS track shown on a TOPO map of the Reserve.  
Located above the dam near the Blue Schist creek crossing.

The last attempt was launched after the aborted docent training class on Friday, February 11th, and this time the tree was located in a very steep arroyo with a very pretty stream running down it. As Laura and Andy scrambled along the near vertical side of the arroyo, Laura was heard to exclaim, "There it is!!!!"

Congratulations to all, thanks for all the effort that went into confirming the location of this tree on the Reserve, and thanks to Carol, expedition photographer, for the photos.



"There it is!!!"



Andy takes a GPS reading while Laura gathers leaves for confirmation,



A Sedgwick Gothic.

# Featured Research Project

Project Title: "The Role of Apparent Competition and Patch Geometry in Mediating the Invasion and Restoration of Grassland Communities".

Project Principal Investigators: Jim Reichman and John Orrock, U.C. Santa Barbara

Contact: John Orrock (orrock@nceas.ucsb.edu)



Biological invasions occur when non-native species become established in areas outside of their original range. Biological invasions have profound ecological impacts and economical costs, causing extinction of native species and shifts in ecosystem function that are estimated to cost over 138 billion dollars per year in the United States alone. In the grasslands of California, million hectares (almost 25% of the entire state) are dominated by non-native plants. The work that we have started at the Sedgwick Reserve is to determine whether native consumers (e.g. mice, voles, squirrels, rabbits) are playing a role in the invasion of California grasslands. Specifically, we are conducting experiments to determine if non-native plants fuel increases in native consumers that contribute to the elimination of native plants. Our idea is that, because they create large pulses of seeds and foliage, non-native plants support larger populations of native consumers. Now that these consumers have increased, native plants cannot keep pace with the level of consumption, and exotic plants have taken hold.

The metal fences that you see from the road are designed to experimentally prohibit specific groups of consumers from having access to plant communities. By manipulating consumer access and measuring the response of the communities over several years, we will be able to determine if consumers play an important role in the success of invasive plants. Each large metal area is a series of four different

fences that allows a subset of animals into the area. For example, one fenced area keeps all rodents out of the plot (i.e. no mice, voles, or squirrels), one area only lets in small rodents (mice and voles), one area lets in large rodents and rabbits, and the final area lets all consumers (including deer) have access to the plot. In addition to the fencing, we use live-traps to periodically monitor the experimental areas to be sure that our fences are working and to obtain an estimate of the abundance of rodent consumers.

Ultimately, our work will provide insight into the forces that promote invasion and maintain the dominance of exotic plants. As a result, our work may explain why so many efforts to restore California grassland have been unsuccessful, even after grazing and fire regimes are returned to pre-invasion frequencies. If our hypothesis is correct, restoration can only succeed if native consumers are considered as part of the restoration process, a consideration that our experimental ex-closures is examining. If native consumers are the reason that restoration efforts in California have not been successful, our work will offer a novel perspective on the planning and implementation of successful conservation and restoration efforts.



# Cuttings from the Nursery

By Steve Schulz

**Botanic Name: *Dodecatheon clevelandii***

**Common Name: Shooting Star**

**Family: Primulaceae**



The Primulaceae family is made up of over 600 species in 25 genera found primarily in the Northern Hemisphere. The main characteristics of the Primulaceae family are herbaceous perennial plants with simple basal leaves and scapose (leafless) inflorescence. Common ornamental species in the family are Cyclamen and Primula.

*Dodecatheon clevelandii* is an herbaceous perennial dicot native to California grasslands. It is identified by a whorl of 3" to 4" long ovate to spatulate basal leaves with crinkled margins. The leaves first appear in early winter and begin to flower in February. The inflorescence is a terminal umbel of 3 to 15, ½ diameter flowers on a scapose peduncle 6" to 16" tall. Each nodding flower is composed of 5 reflexed sepals surrounding a tube shaped corolla that is dark maroon with a yellow band and 5 fused petals, deeply cleft, magenta to white in color. The 5 stamens and pistils emanating from the superior ovary are closely grouped creating a sharp cone that points downward contributing to the shooting star name. The fruit is 5 chambered, ovoid to spherical in shape, 3/8" in diameter containing up to 50 seeds.

Shooting Stars are typically found in colonies on sunny open grassy slopes adjacent to oak woodland, chaparral or coastal sage scrub habitats below 2000 feet in elevation from Los Angeles to Marin Counties. Being one of the first wildflowers to bloom, the Shooting Stars are an astonishing sight hovering above the young grass tufts. The bright colors and soft sweet fragrance are worth the trek up the hillside on a winter or early spring hike.

# K.I.N

By Susan Brooks

In January, Kids in Nature visited the UCSB campus. Each classroom was hosted by Dr. Jennifer Thorsch and her colleagues at the new facilities of the Cheadle Center for

Biodiversity and Ecological Restoration (CCBER).

Activities included planting a plot with native plants, visiting bioswales, using microscopes to explore plant structure, learning about the structure and importance of

insects, and exploring the structure of flowers. The Donald Bren School of Environmental Science and Management had a display to explore the importance of recycling and reducing waste. Live reptiles—rosy boa and friends—were a special treat. Each student got to take home their own bookmarks created by mounting dried plant material on paper made from recycled denim.

The opportunity to visit UCSB—working in a state-of-the-art laboratory space, meeting college students, seeing the campus—is key to KIN's goals to excite students about science and encourage them to attend college. CCBER and affiliated UCSB staff and students did a fantastic job planning the activities and organizing the day. Many KIN teaching docents participated, sharing in the excitement. Thanks to all who helped to make our UCSB visits such a success.



# Bird Walks

by Fred Mahetanz

## THE ACORN WOODPECKER (*Melanerpes formicivorus*)



Acorn Woodpeckers are often the first birds seen by visitors to Sedgwick Reserve. These noisy and colorful birds frequent the oak woodlands of the West. They fly among oak trees, telephone poles and fence posts and their greetings and confrontations are announced with a variety of raucous calls. Two remarkable characteristics set Acorn Woodpeckers apart from other birds.

These woodpeckers harvest acorns from oaks and store them in holes drilled in bark or soft and rotting wood of trees, posts and poles. A collection of these acorns, called a “granary”, sometimes contains several thousand acorns. Woodpeckers may also shove acorns into inaccessible places in buildings or push them through holes in thin fence posts to drop to the ground unused. One conjecture as to why the birds store acorns in single holes rather than in bulk, as does a close relative, the Red-headed Woodpecker of the East, is that in warmer climates, this method of storage prevents mildew. It is of note that at least two species of oaks are necessary to sustain a population of Acorn Woodpeckers in California

Additionally, Acorn Woodpeckers live in various arrangements of family groups, of up to fifteen members with one or more breeding males, one or more egg-laying females and the rest of the group helping with feeding young and gathering, storing, defending and maintaining acorn stores. Each family group monitors the nature and activities of neighboring groups, and, when there is a vacancy in one of the breeding-bird slots there is fierce competition for this slot from helpers in other groups. Since replacements always come from other groups the gene pool is augmented.

The male Acorn Woodpecker is a medium sized black and white bird with a crimson crown, white forehead and distinctive white rump and white patch on a black wing. Females are distinguished from



*Acorn Woodpecker; Adult Female (left) and Adult Male.  
Photo: Rick and Nora Bowers from the Birds of North America  
<http://bna.birds.cornell.edu/BNA/>*

males by a broad black band separating the red crown from the white forehead. The toes, arranged two up, two down, and stiff central tail feathers, allow the bird to hitch up and around trunks and branches. The Acorn Woodpecker has a very long tongue which can be extended a remarkable distance when feeding. This extension is made possible by a mechanism, connected to the tongue, which curves around the back of the skull and is attached to the front of the skull or in the nostril. This arrangement may cushion the brain when the bird is drilling holes.

Acorns furnish over half of their diet, which includes nuts, fruits, sap and insects. Walter Koenig, acorn expert at The Hastings Natural History Reservation, has said that the persistent theory that woodpeckers store acorns for the weevil grubs contained therein is not true. He cites the fact that many acorns do not contain grubs and most of the others show a small hole indicating that the grub has left. However, insects, with a high protein content, are preferred food, eaten whenever available. The Acorn Woodpecker’s species name is “formicivorous”, meaning “ant eating”. While the bird does not eat as many ants as its larger brown relative, the Northern Flicker, stomach analyses have shown an up to 10% ant content, especially flying ants.

When breeding, four to six white eggs are laid in a cavity by one or more females, incubated eleven days, and young are fledged by parents and helpers in one month. Young are fed both insects and acorns but get a higher percentage of acorns as they age and nutritional requirements increase. Acorns seem to be backup when other food is unavailable. Studies show that the number of young per group is positively related to the availability of acorns for a given year.

Acorn Woodpeckers bring great energy and entertainment to our oak woodlands. We wish them well.



*Acorn Woodpeckers storing acorns in drilled holes. Drawing by J. Schmitt*

## THE HIKING PROGRAM

By Nick Di Croce

*Logic, my dear Zoe, merely enables one to be wrong  
with authority.*

From "The Wheel in Space."



As we have frequently joked in the docent classes, does the above little quip apply as we do our interpretative comments for the hikes? Who knows?

I think the folks who have participated in the Public Hikes and the off site hikes have been having a ball. The latest Public Hike in February was very well attended and went off like clockwork. Thanks to all those docents who helped with the day: Lucy Thomas, Carol Weingartner, Jayne Harasty, Kate McGinnes, Patricia Martin, Barbara Goldstein, Jacques Poirer, Bill Turpin, Suzi Trubitz, Nelle and Nancy Byrne and, of course, Fearless Leader Mike. It was a perfect day for hiking. The Artists Workshop running simultaneously certainly seemed to pick up the "buzz" for the day, and I noticed quite a few folks who hung around to picnic at the Ranch. Well done!

We have been having quite a time with the special and off-site hikes as well. At Laura Baldwin's suggestion, we did a series of "ex-



*Guest artist Larry Iwerks.*



*Big Leaf Maple??? Which way next?*

peditionary" hikes, searching for the Big Leaf Maple that is reputed to exist on the property. On the third hike, they found it! Not exactly where it was supposed to be – but proof that it exists is here with this happy lady!



*Laura and the prize maple!*

I think the idea of "expeditionary" hikes is a great excuse for more docent hikes on the property. In that vein, the next challenge hike might be to find a silver spur that was won in a competition by Dutch Wilson, one of Duke Sedgwick's friends, and then lost on the property sometime in 1955. It's on the east side of the property. Or is it the west side? Maybe we'll find it.

The second in our series of "off site" hikes was led by Jacques in the surf and dunes of Surf on February 4. What a unique place to hike. Check this out:



*Jacques leading hikers at Surf.*

The next off site hike is planned for February 25. Susan Brooks and Carol Gibbens will be leading us on the Tequepis Trail, which is just off San Marcos Pass near Lake Cachuma. I understand the views are spectacular and that you get one of the few views of the full length of Lake Cachuma.

The next public hike is planned for Saturday March 11. The wildflowers – hopefully – will be the big feature. Even with the scant amount of rain, we have already seen Blue-Eyed Grass, Blue Dicks, Shooting Stars, Humming Bird Sage, Monkey Flowers and California Poppies on the property.

# Duke's art comes home!

By Paul Nefstead

Barbara Huebel reported the gift to the Reserve of an unidentified portrait bust. Considerable research by the docents was confirmed by Alice Sedgwick who said she thought it might be Conant, a president of Harvard University. Further research brought a photo of Conant that matched the bust. ID is now complete.



Duke's son Jonathan agreed that the two did not overlap at Harvard but that the University commissioned the bust. Hopefully "our" bust is a copy made from the same mold and Harvard has theirs. Let's not search further.

But who was Conant? James Bryant Conant (1893 - 1978) was appointed President of Harvard University in 1933 and held the post until 1953. During World War II he also served as chairman of the National Defense Research Committee overseeing the Manhattan Project and the atomic bomb. He was also the U.S. High Commissioner and Ambassador to Germany from 1953 to 1957.



Conant is remembered for changing Harvard from an elite, classical, New England family bastion into a world-class university with emphasis on science and research. He can even be blamed for developing the S.A.T. tests of today as a tool of meritocracy.

# Calendar

## FEBRUARY

Feb. 17 - Docent Training: Oak Population Ecology

Feb. 24 - Docent training: Watershed

Feb 25 - Field Trip: La Colina Jr. High School

## MARCH

March 1 - KIN (Los Alamos)

March 2 - KIN (Santa Ynez)

March 3 - Docent training: Native Materials Craftsman

March 3 - 5 Los Angeles Conservation Corps

March 8 - KIN (Arellanes)

March 9 - KIN (Ontiveros)

March 10 - Docent training: Spring Wildflowers of Sedgwick

March 11 - Public Hike/Art with the Local Masters

March 11 - Field Trip: Island Chumash Guides field trip

March 14 - Field Trip: Pacific Christian School

March 17 - Docent training: Chumash Culture

March 18 - Field Trip: Girl Scout Nature Walk

March 20 - Field Trip: Los Berros

March 24 - Docent training: Movement in Nature

March 29 - KIN (Los Alamos)

March 30 - KIN (Santa Ynez)

March 31 - Docent training: Practice Hike and GRADUATION

March 31 - April 2 Tom Gamache Photography Workshop



## Where on the Reserve???

Can you name this place on the Reserve? Andy found a very nice looking Bob Cat wandering here.

Answer will be in the next issue.