

Sedgwick Field Notes

Occasional Ramblings for Volunteers and Friends of Sedgwick Reserve

Editor Andy Lentz

April 2011

Tipton Meeting House: Open for Business

By Gay Larsen



It was a long time in the making, but everyone agrees that it was well worth the wait. Sedgwick Reserve friends from near and far gathered on March 14 for the official dedication of the newly completed Tipton Meeting House. The celebration drew a standing room only crowd of nearly 200, including UCSB campus officials, Reserve docents, contributors, and other friends of the Reserve.

Also on hand were the building architects, Thompson Naylor Architects, Inc. and many others who were involved in the building's construction which earned LEED Platinum rating from the U.S. Green Building Council. Tipton Meeting House is only the fourth building in the University of California system to receive this rating, the highest possible. Designed and built to have minimal impact on the land, the Meeting House maximizes the use of local, natural and recycled materials; harvests the sun, rain and wind; and incorporates many sustainable design features including a solar-power array and various architectural innovations that promote summer cooling and prevent winter heat loss.

The Tipton Meeting House provides a central gathering place for the Reserve's 5000+ annual visitors, administra-

tive offices for the staff, as well as meeting rooms for the docents, and a 75 seat lecture hall to accommodate remote telescope presentations K-12 outreach activities, as well as community events and other meetings.

The building was made possible by grants from the Tipton Foundation of Santa Ynez and a bequest from UCSB alumnus Marvin Clarke. Chancellor Henry Yang thanked both donors and presented Nancy Byrne, long-time docent and devoted Sedgwick friend, with a large hand-crafted key to the Reserve as well as the substantial plaque presented for LEED Platinum rating that now hangs in the building foyer. The building offers many additional attractive naming opportunities for donors who are interested in supporting the Reserve's endowment.

Guests enjoyed wine from the Baehner Fournier Vineyards (courtesy of docents Bob and Vickie Baehner) as well as Kalyra Winery and Hitching Post II. Many thanks to all who contributed wine and time to organizing the event. All agreed it was a fitting debut for a grand building with an important future!



Photo © Monie Photography

Chancellor Henry Yang and Dilling Yang with help from Nancy and Joe Byrne of the J.E. and Lillian Byrne Tipton Foundation display the weighty plaque that reflects the LEED Platinum rating the Tipton House received from the U.S. Green Building Council.



Photo © Monie Photography

Generous Sedgwick friends and neighbors Paul and Sallie Flum enjoyed reconnecting with former Reserve manager Mike Williams, during whose tenure the vision for the Tipton House was launched.



Photo © Monie Photography

A few of the great minds behind the Tipton Meeting House construction, from left: Jordan Sager, UCSB LEED Project Coordinator; Dennis Thompson, Principal, Thompson Naylor Architects, Inc.; Steve Eggemeyer, UCSB Design and Construction Services Project Manager; Dennis Allen, President, Allen Associates; Jeff King, Architect, Thompson Naylor Architects, Inc.



Photo © Monie Photography

The community turned out to celebrate from left: Karl Hutterer, Executive Director, Santa Barbara Museum of Natural History; John Martinez, Project Manager, Las Cumbres Observatory; Steve Windhager, CEO, Santa Barbara Botanic Garden.



Photo © Monie Photography

Flags are flying: Girl Scout Troop #50174 from Buellton provided the Color Guard Procession and led the guests in the Pledge of Allegiance.



Photo © Monie Photography

Enjoying the gathering and the wine at the dedication from left: Peter Schuyler, Kate McCurdy, Reserve Manager, Bob Hanson and Karen Hanson, UCSB Office of Research.



Photo © Monie Photography

A lot of help from our friends from left: Architect Dennis Allen, Sedgwick donor Linda Duttonhaver '77, Architect Dennis Thompson and Lars Bildsten, Physics Professor at the Kavli Institute, UCSB.



Photo © Monie Photography

Kate McCurdy addressed the gathering in the Clarke Lecture Hall and particularly thanked those in the audience who have been major contributors to the Reserve's development during her tenure.



Photo © Monie Photography

Docents Dolly and Charles Mullin, joined by Lucia Snowhill, University Librarian, and Docent Carol Gibbens.



Photo © Monie Photography

Save the Date! Barn Dance Friday, July 8, 2011



Photo © Monie Photography

Grab your partner and shine your boots for the Second Annual Sedgwick Barn Dance.

Manager's Notes

By Kate McCurdy

Recently a researcher who hadn't been to Sedgwick in several years came to visit me. Like many visitors arriving, his attention was focused outward onto the land and when he got to the fork at the Field Station intersection, he missed the helpful directional signs that Land Steward Dennis Beebe has been making and installing for the Field Station. As the researcher tells it, first he landed at the rear of the Ranch House where my office was for several years. There he met the Reserve's Land Steward Eric Massey, who now occupies living quarters there (originally the space was where the Sedgwick's wait staff were housed). He then wandered into the Ranch House, where I lived just over a year ago before moving into the new Manager's Residence on the west side of the



New native grass plants.

Field Station. Now a dormitory, not a soul was to be found in the Ranch House. From there he went to the former Studio bunkhouse, our temporary office for a few months while the Tipton Meeting House was being completed. The Studio is now a construction zone—being renovated for future use as classroom, art studio and extended-stay apartment. Traveling westward, he finally found me, happily settled into our luxuriously large and exquisite offices in the Tipton Meeting House. Like many of you, he couldn't get over all the changes that have taken place in the past year, and I share your amazement at all the moves we've made in that time!

Although I am thankful to report that no more moves are planned for anytime soon, large-scale projects continue. In addition to the Studio renovation, we'll be trenching this summer to bury water and electrical lines around the Field Station. A new machine shop is being planned. And we're getting an on-line weather monitoring station that is part of the Natural Reserve System's climate monitoring network (a collaboration with the Desert Research Institute). None of these projects would be possible without state grants and private support. Likewise, programs such as public hikes and K-12 class visits—and staff to administer these programs—would be impossible without private donations. We are working hard to meet our short term goal to reach \$1 million in our operating endowment by the end of 2011. Thanks to very generous support from donors over the last few years, we currently have approximately \$450,000 in our endowment fund. Recently, some of these same donors who recognize the importance of an endowment fund, have offered matching challenges totaling \$200,000. We need to raise \$350,000 to receive the matches, which will bring us to \$1

million towards our overall goal of \$4 million. An endowment will help us put Sedgwick's new facilities to optimal use and keep the Reserve open to the public, researchers and students. I am optimistic that we will reach this goal and continue to provide access, amenities and support to the Reserve's users.

You may have noticed several new faces at the field station. I am extremely grateful to the many docents who helped us move into the new office, and to Margo Doohan in particular for helping us get organized. Nick Giese and Curtis Davenport have transformed the area around the Tipton Meeting House and the old "Foreman's House" into vibrant native plant gardens. Newly hired Amy Miller and docent extraordinaire (Saint) Nick DiCroce have teamed

up to cover education and public outreach, respectively. Sue Eisaguirre's shoes may be impossible to fill, but at least we now have twice as many feet running our programs!

With the many visits for the 4th and 5th grade Outdoor Classroom program winding down in May, Amy will be working to restructure the Reserve's K-12 education program over the summer. Look for new offerings in the fall term providing one-day field trips for elementary and middle schools that focus on astronomy, geology and natural and cultural history of Santa Ynez Valley. In the meantime, the Reserve's docent program will concentrate on outdoor education activities on Thursdays, Fridays and Saturdays. The Reserve will be open for research, maintenance and administration on Mondays, Tuesdays and Wednesdays. Sunday's are reserved for the wildlife of the property to run free and kick up their heels in the absence of humans! (In other words, Sedgwick is closed on Sundays.)

What an amazing number of good things have transpired over the past year at Sedgwick. The beauty of the site remains, but just about everything that can fit in a box has been moved from one place to another. We welcome your visits to the Field Station at our Open Houses held on the second Saturday of every month—unless the weather is uncooperative. We've expanded this public hiking day to also include Field Station tours; landscape access to painters who want to set up their easels and create art; families who are rediscovering the joys of a picnic; and those who simply want to step back in time and enjoy a quiet morning under the oaks.

Outdoor Education

by Sue Eisaguirre



Throughout the past three years, over 200 students have had the privilege of being part of Sedgwick's Outdoor Classroom program. Starting as fourth graders, returning in fifth grade and next month these now sixth graders will finish the three-year program. They will hike from the top of the Reserve to the field station, stopping in route to tell about each of the ecosystems they pass through, proving to themselves, the docents, and teachers that they do in fact know what is in their back yard!

In February, Linda Corley, her 5th grade students and their families along with the school's principal, Mrs. Ontiveros, attended the Outdoor Classroom astronomy evening. After dining in the new Tipton Meeting House's Clarke Hall, Fred Marschak, SBCC professor, gave a fabulous spectral analysis presentation. Just before heading up to the Observatory, the students proved their astronomy knowledge by easily defeating the parents in a rousing game of "Are You as Smart as a Fifth Grader?" Once at the Observatory, Rachel Ross from LCOGT took everyone on a tour of the night sky. Students and their families observed Jupiter through the 7" refractor telescope and M48 through the .8-meter telescope, while the Sedgwick 8" scope focused on Sirius and then the Pleiades.

The students and families rounded out the evening roasting marshmallows and making s'mores. By 8:15 p.m. the bus was headed down the road and the docents were cleaning up the Tipton Meeting House. We all departed at 9:00 p.m., closing out the final Outdoor Classroom astronomy evening this year. I had a chance to visit with Mrs. Ontiveros, the principal, at the end of the evening. She was very proud and amazed at the breadth of astronomy knowledge the students demonstrated. She was also very impressed with Sedgwick Reserve, the docents, and the program, and she thoroughly enjoyed the evening.

While the overarching intent of the Outdoor Classroom was to reconnect youth with nature, thus nurturing a genera-

tion who will care for and be good stewards of the land, the program also had to prove itself viable to the schools. To do so it had to affect the students' standardized test scores positively. I am proud to say, it did. While we worked with very dedicated teachers, who of course deserve the majority of the credit, they are quick to say that the program truly reinforced their in-classroom units of study by either introducing concepts or elaborating on and making concepts come-alive.

The teachers give the docents credit for piquing student's curiosity about the natural world and at the same time relating that to the science standards at hand. I too, give the docents credit for being able to take what nature offers on each hike, usually different each time, and creating a memorable, positive experience for the students all while tying it into the students' studies. The success of the program was and is truly due to the incredible volunteers at Sedgwick.

The final "Nature Game Olympics" where the fourth grade classes from both schools come together to compete in four separate challenges will be held on Friday, May 6. Parents are invited and welcome to attend. After an exciting competition, a special presentation and lunch, prizes will be awarded and students recognized for participating in the program. The Outdoor Classroom will end, and the "flame" extinguished for this year!

The Ultimate Outdoor Classroom

S—urprising
E—xhilarating
D—elightful
G—lorious
W—ild
I—ncredible
C—ool
K—een

R—esplendent
E—xciting
S—timulating
E—nergetic
R—ustic
V—aried
E—lectrifying

My most sincere thanks to everyone who contributed to the success of the program.



Bird Walks

By Fred Machetanz

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)



Yellow-headed Blackbird near the pond.
Photo Rick Mexico

Yellow-headed Blackbirds were discovered by Reserve Manager Kate McCurdy and Laura Baldwin on the Sedgwick Reserve late in the day of the Christmas Bird Count. This was a new species (#177) for the reserve. Three males were seen in an oak above the lane to the pond on count day and two females were seen on wires leading to the pond a few days later. To give some idea of the rarity of their CBC sightings, Mark Holmgren informed me that the Santa Barbara CBC has had a very small history of Yellow-headed Blackbird reports. Since 1940, one was spotted in 1962, one in 1963, and four in 1975.

The Yellow-headed Blackbird is a member of the Icteridae family which includes meadowlarks, orioles and various blackbirds. The male is a robin-sized, spectacularly spiffy-looking bird with a bright yellow head and breast, black body and white wing patches. The female is considerably smaller, brownish with muted yellow breast, and no wing patch. This blackbird breeds over vast areas of Western United States and Southwestern Canada in freshwater marshes. It winters mostly in Mexico with a few wintering birds found in the southern portions of California, Arizona, New Mexico and Texas. Although *Xanthocephalus* (“Yellow head”) is favored with striking plumage, it must have been behind the marsh when the good songs were passed out. Kenn Kaufman characterized the Yellow-head’s song as perhaps the worst song of any North American bird. Imaginative writers have likened the song to the wail of a dying catamount (Dawson), the drawl of a discontented chicken (Hoffman) or a buzz saw biting into a hard log (Oberholser).



Yellow-headed Blackbird
Birds of North America
Cornell University

Although this blackbird’s diet varies with location and season, it is conjectured that two-thirds of the bird’s fare is seeds supplemented with waste grain. During the summer it feeds primarily on insects.

Often Yellow-headed Blackbirds nest in the same marsh with Red-winged Blackbirds. The Red-wings arrive first and select their territories throughout the marsh. After two weeks, the Yellow-headed arrive and in actions suggestive of the 900 pound gorilla, take over all the best of the territories from the Red-wings and force them into inferior nesting sites. Although Yellow-headed are somewhat indifferent to human intruders near their territories they are very territorial toward Marsh Wrens. The wrens are known to peck blackbird eggs and ruin them.

The Yellow-headed Blackbird has a polygynous mating system with males typically mating with one to six females, the number probably depending on the richness of the resources in the male’s territory. Each female in the “harem” selects a nest site and builds a nest in two to four days. The nest is a bulky, cup-shaped affair, fashioned around four or five upright stems of dead vegetation. The nest is then lined with fine, dry grasses or fine, dry, marsh vegetation.

Typically three to five gray or pale green eggs, blotched with brown or gray, are laid. The female incubates the eggs for 11-13 days and the young are fledged in 9-12 days, with both parents feeding. Unable to fly when fledged, the young are tended by both parents for another twelve days.

In flight, this blackbird is said to have a long, sturdy profile with large head and big bill. It tends to glide on open wings more than does the Red-winged Blackbird.



Distribution of the Yellow-headed Blackbird.
Birds of North America, Cornell University

Burn Trail—Botanical Observations

By Larry Ballard

A group of about 25 Sedgwick docents and ten visiting docents from the UC Botanical Garden at Berkeley braved the elements, including unseasonably cold weather and hail, to hike the Burn Trail on April 8. While most of the fire-following annuals were no longer to be found, several other plants put on a good display.

Previously uncommon on the Reserve, Chaparral Mallow *Malacothamnus fasciculatus* now dominates several acres of hillsides. Within three weeks after the fire in the



Chaparral Mallow *Malacothamnus fasciculatus* above. At the right is a close-up of the flowers.

Photos U.S. Department of Agriculture



fall of 2007, leaves of Chaparral Mallow popped up through the ash layer. If these plants had come from a dormant seed bank, they would not have sprouted until after the winter rains, but as with other species in the genus, Chaparral Mallow has an extensive network of rhizomes (underground stems) that persist for decades or more during fire-free intervals without ever sprouting. After fire, the rhizomes send up even-age sprouts with fairly regular spacing, indicating that acres of mallow may consist of a single plant. There is virtually nothing in the botanical or fire ecology literature that addresses this post-fire response in *Malacothamnus*, but

it has been observed in other species in the genus, including one of the rarest.

The first post-fire saplings of Gray Pine were found along the trail this year, and based on their height and single whorl of branches, are probably only two years old. This indicates that the seeds were probably brought in to the burn area after the fire and cached, possibly by Scrub Jays or small mammals. Further searching will hopefully turn up some four year old saplings in the area.

Another highlight of the hike was the discovery of a plant previously unreported on the Reserve: Tuberous Skullcap *Scutellaria tuberosa*. The species epithet “tuberosa” refers to the small tubers that form at the tips of the roots. This diminutive member of the mint family is widespread in California, but generally occurs in small, widely scattered populations. It’s a blue-flowered perennial that is only a few inches tall and is one of about 50 plant species on the Reserve that is known from only a single population.

The genus *Scutellaria* consists of about 350 species and is found on all continents but Antarctica. Several species in



Tuberous Skullcap *Scutellaria tuberosa*

Photo U.S. Department of Agriculture

the genus have been utilized for centuries for medicinal purposes, treating a wide array of human health woes. Although Tuberous Skullcap has no detectable scent, nearly 300 compounds have been isolated within the genus, primarily from Eurasian species. Some of these compounds have antibacterial or antiviral properties. In the past year, half a dozen articles have been written about the pharmacology of compounds found in *Scutellaria* that have an anti-cancer potential. How and why these curative chemicals evolved within the genus is completely unknown.