



Finch Creek Gazette

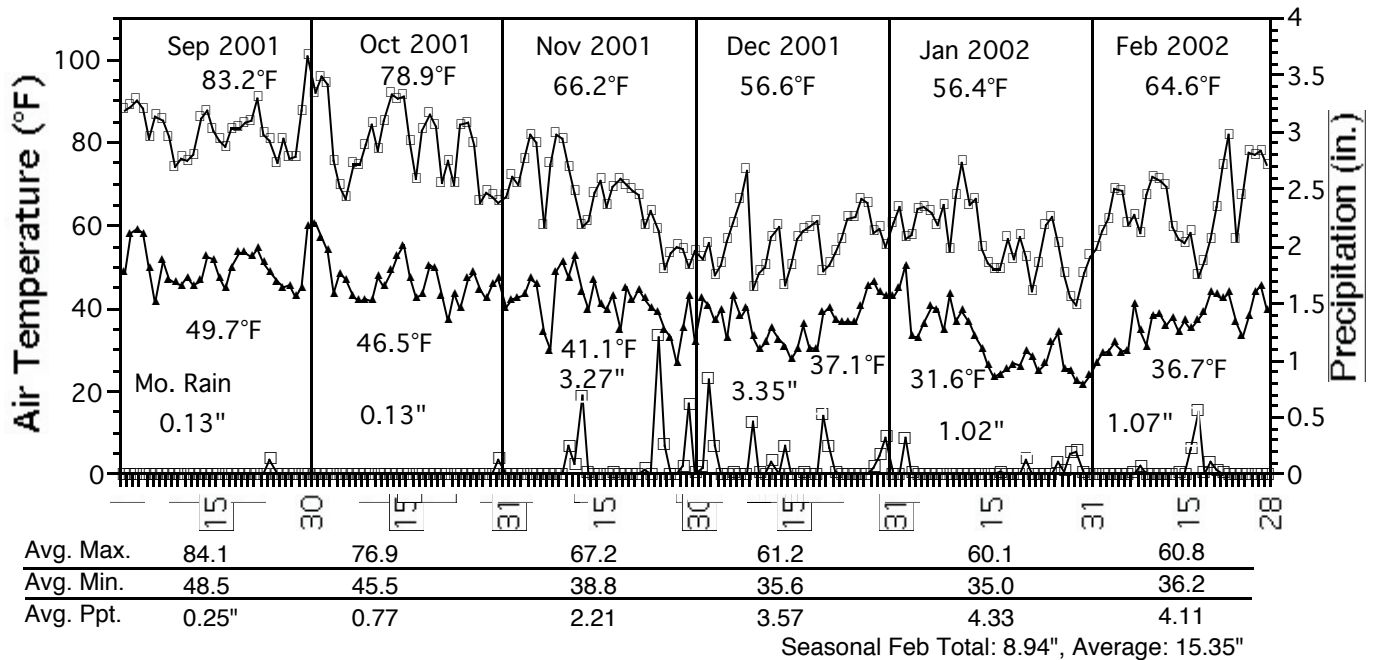
The Quarterly Newsletter for Friends and Members of the Hastings Natural History Reservation

A Biological Research Station of the **Museum of Vertebrate Zoology**, University of California, Berkeley, and the University of California's Natural Reserve System

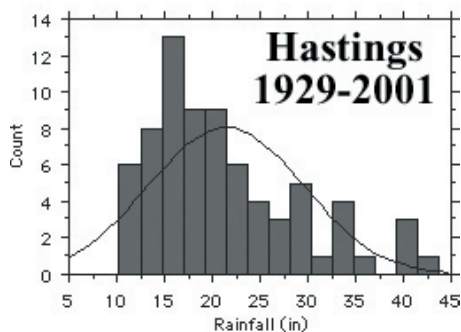
Website: <http://www.hastingsreserve.org> (for more detailed newsletter, with color pictures - and lots more)

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Field Notes



Our weather pattern seems to have slipped back into the "normal" state of affairs. For a Mediterranean climate, the pattern of rainfall totals for each year is very different, than say in Holland or Iowa. Extreme numbers have a much larger influence on the calculated "average" than you might suppose. In our highly unpredictable climate, if one calculates an average for total rainfall over many years (say 1929-2001 for Hastings and Jamesburg), the average is much higher than the actual rainfall for most years. So, we are once again in the common situation of being "below average" in rainfall. We have had only 58% of the average rain we can ex-



pect by Feb 1. Our big years including '38, '41, '68, '83 '95 and '98 are deceptive, and unduly bias this long-term average. Wet years stand out on the left side of the smaller graph. The line on the small graph is drawn as if the average and middle years were the same and in the center. We clearly have many below-average (dry) years (right side) and a few really wet years (left side).

Acorns are the staff of life in these woodlands, and this fall, the acorn crop around here was not as bad as some years, only about fair to middling. Some of the recent acorn crops (2000) were amazing and subsequently, we had record numbers of mice in the buildings. This year, only the black oaks were doing well, and as black oaks are uncommon around here, things look only average for hundreds of species that depend on oaks. For a complete digression on the topic, see the 2001 Acorn Report on the Hastings website.

For the first time in at least a decade, many of the vernal pools around Hastings

did not fill this winter. Laguna Conejo, Blomquist Pond, and the roadside ponds west of Hastings remained dry, and so the pond-breeding newts, tiger salamanders, tree frogs, red-legged frogs, toads, etc. will have to wait for another year. Peter Trenham's long-term studies of the amphibians indicate that, as one might suspect in this variable environment, not all adults breed every year anyway. Some skip breeding for a year even in wet years. Newts by the thousands crossed the Carmel Valley road only 2-3 nights this winter.

A well-planned and executed control burn was conducted on Oct 20 by our neighbor to the east, John Boekenoogen and CDF as a part of the statewide Vegetation Management Plan. About 1,000 acres of long-overgrown brush were burned from 10 am to 4pm, starting from a fire line around the perimeter, and rapidly ending in the center as the fire ran out of fuel. Photos on the website!

Docent Program Coordinator?

Do you know anyone who would be able to volunteer to coordinate a docent program at Hastings? Try though we may, it seems there are always more things “to do” and more pop up each day. I am looking for someone who could work with me for 5 - 10 hours a week to define the volunteer opportunities here at Hastings, and then work to find the right connections of people and opportunities. It would involve a lot of phone calls, and some experience in training and supervising docents. A similar docent program has been around for decades at the Jasper Ridge Preserve, and in our local parks.

The kinds of docent opportunities here

include helping with keeping up the buildings and grounds, clearing trails, producing a newsletter, assisting researchers in studies of plants and animals, restoring oaks and grasslands, involving local high school students, working on the plant collection, helping with the website updates, assisting with an annual open house, providing special displays at local and regional museums and fairs, and...well. The list goes on. Please contact Mark Stromberg if you want to tackle an interesting and educational project.



**Snow blanketed Hastings Jan 28-29, 2002.
View to Arnold Flats, from Hastings Cabin.**

Research Highlights

Interns

With the start of a new research site for the winter study of western bluebirds, a new group of interns arrived to work with Janis Dickinson. During August and most of September, the Robertson House was quiet. But at the end of September, seven new Hastings residents arrived. Chandreyee Mitra, Andy Reinmann and Melody Euparadorn arrived to work with Janis Dickinson's bluebird study and once again keep the Robertson House busy. Katharine Thorington and Jennifer Wang moved in at same time to continue the observations of acorn woodpeckers with Walt Koenig. Katherine has a degree in biology from Mt. Holyoke, and recently worked at the Archbold Biol. Station, studying scrub jays. Jenny Wang has a degree from Cornell, and spent last summer at the Point Reyes Bird Observatory. Corrie Miller and Jennifer Leyhe arrived in early January to help Alan Krakauer collect data on turkeys and they set up housekeeping in the Red House. Corrie has a degree from Vanderbilt and worked recently at the Mountain Lake Field Station in Virginia. Jennifer Leyhe, a graduate of Towson U. (in MD), was an interpretive naturalist at the Cape May Bird Observatory, where she tracked hawks. This group is shown in the photo, along with Alan Krakauer, enjoying one of our two snowy days this winter.

Janis and Alan are now centering their



Winter snowbirds at Hastings: L-R: Andy, Corrie, Melody, Jennifer, Jenny, Katherine, Chandreyee and Alan.

studies on the research area provided by Rana Creek Ranch. We really appreciate this well-managed blue oak rangeland; we could not do these large-scale studies without this access. Our sincere thanks to Rana Creek Ranch!

Three students pursued independent studies. Andy, who has a degree from SUNY Binghamton, is interested in plant ecology. Andy investigated potential difference in the habitats (slope, elevation,

soils, etc.) of male and female mistletoe plants on the oaks. Melody, with a degree from the U. of Delaware, worked with Chandreyee (Amer. U. of Atlantic) on an independent project with bluebirds on Hastings. Setting up feeding stations, they provided meal worms and watched banded residents grops (40!) and occasional visitors as they sorted out which individual birds dominated this sudden rich resource.

Research Highlights

Resident Researchers

This fall was relatively quiet, as Walt Koenig, Janis Dickinson and Mark Stromberg were the only resident researchers. However, a variety of other researchers visited and kept things lively. Janis continued the work on western bluebirds, opening a new site on Rana Creek Ranch. New boxes were placed on trees and mapped.

Walt and Janis tackled major writing projects. Janis wrote the section on social behavior for new Encyclopedia Britannica. Walt and Janis each wrote a chapter in a book they are editing on cooperative breeding in birds. Walter presented invited talks at the U. of Washington, the California Oak Symposium in San Diego, Humboldt State in Arcata, and New Mexico State University. Walt and Jean Knops measured the acorn crop in Minnesota, and Jean returned to Hastings for the annual California Acorn Count. Mark continued organizational work for a book on California grasslands, and was invited to an East Bay Regional Parks special course to summarize grassland restoration in California. Mark, Janis and Walt were in-

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Visiting Researchers

Beth Burnside, Vice Chancellor for Research- UC Berkeley, and Craig Moritz (photo) spent a weekend in October at Hastings. We discussed a variety of plans, and hope to see them both back more often.

Louise Jackson (UCD) was recently funded to continue her studies of the soils of restored grasslands. Louise and Mark gathered seeds of a deep-rooted native late-season composite (*Madia elegans*) for planting in the restored fields. Louise installed stainless steel soil gas sampling tubes in the tilled plots, and will be monitoring carbon sequestration this year.

Caitlin Bean, a graduate student at San Jose State University and working with Jim Patton (MVZ), spent a week in August trapping kangaroo rats at Hastings. Two species are present, *Dipodomys heermanni* and *D. venustus*.

Bill Carmen visited from Berkeley in September to join Walt in the acorn count.

Janet Beales, UC-Davis, spent two weeks of nights at Hastings, working every day at a common garden of Monterey Pine seedling

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Janis Dickinson, Walt Koenig, Mark Stromberg, Beth Burnside and Craig Moritz.

Visiting Classes

In September, Matt Holland brought the UC Davis Population Biology Graduate group out for a 3 day visit. Later, Prof. Gordon Frankie's (UCB) Conservation Biology class spent 3 days from Hasting, touring various sites in Monterey County where conservation biology issues are active. In October, Jan Randall's (San Francisco State) mammalogy class trapped here for 3 days. They actually saw a mountain lion, along with bobcats and many small mammals. Tom Parker's (SFSU) Plant Ecology class spent 3 days measuring water potential, photosynthesis and other parameters. Then, over the first weekend in November Jim Patton's (UCB) Mammalogy class visited. Jim and Carol Patton has been hosting this class at

Hastings for 30 years, and now that Jim has retired, this was probably the last such class. We will miss Jim and the annual trapping. His passing marks the end of an era of field-based mammalogy studies set in motion by Joseph Grinnell, E. Raymond Hall and Jim Patton. In January, Tom Parker returned with Staci Markos for the Jepson Herbarium's public outreach class on *Arctostaphylos* (Manzanita) taxonomy and classification. Late January saw the return of the Gustavus Adolfus College (MN) ecology class- part of their tour of NRS sites. In February, Daniel G. Mulcahy (Utah St.) brought his Olympic refugees and herp students to Hastings for a week of collecting and observing.

Hastings Facilities

We all shifted to new ArcView GIS coverage of Hastings and Rana Creek, and Mark attended two classes in ArcView at the Sierra Nevada Aquatic Research Lab, another NRS site. Two new computers (Dell and I-Mac) were installed in the Davis Lab for intern and visitor use, and a new Dell was installed in the Linsdale Library for shared GIS work. All were put on the network, and software was installed to let the Macs and PCs share files. Ryan Heacock at Rana Creek Habitat Restoration and Mark classified the vegetation on Hastings for the GIS.

MVZ provided a used Chevy Blazer that seats 5 and we set that up as a commuter vehicle to our remote sites.

Once again, Mel Dixon at UCB is helping with contracts to improve the buildings. Our offices were uninsulated concrete walls with single pane windows. As cooling was impossible and heating very expensive, we sought campus funds to improve our working environment. We replaced the office and Davis

Lab windows and had 3" of rigid styrofoam glued to the walls on these buildings (photo). This will be covered with beige stucco. The old (1930s) tiles were removed (for sale!) from the Linsdale Library and the roof



was replaced with new shingles. Mark cleaned mouse droppings, fixed mouse holes, and removed junk to set up new desk space there for the GIS and visitors computers. Starting in January, this work should be done by April.

A land slump behind the Hastings Lab was removed and a retaining wall was installed to assure proper drainage for the building. A propane heater was purchased but not installed at the Robertson House; it is pending warmer weather as it will require a few days without heat to install. We passed an EHS inspection for hazardous materials and set up a training and removal process. The electronic entry gate was repaired and maintained, including some new wiring and improved battery setup. Easement documents and maps were prepared to allow Pac Bell to replace the above-ground wire on Haystack Hill with a larger capacity wire underground from our entry gate to the Hastings well.

Mark Johnson installed a new decorative tile floor in the School House kitchen before Christmas, and replaced the roof on the Caboose near the Robertson House. The usual long list of minor repairs on the houses and facilities kept Mark busy.

terviewed as a part of a video in production to describe research and education in the Natural Reserve System. A list of the various scientific papers published by Hastings researchers this fall and winter can be found on the website version of this newsletter.

Visiting Researchers (continued)

being challenged for pitch canker. Her garden was planted on the last remaining open island of native coastal terrace grassland on the Del Monte Forest lands,

Maria Soares (UCB) continues her studies of the voles on Haystack Hill, making the occasional visit. Matina Kalcounis-Rueppell (UCB) is working with Maria, and Eileen Lacey on studies of small mammals. Matina spent several weekends trapping deer mice and voles here. Peter Trenham (UCD) visited briefly, given the lack of water and thus limited amphibian breeding. Peter published a major paper on population sizes and movements of the California tiger salamanders nearby Hastings (Trenham, P. C., Koenig, W. D. and H. B. Shaffer 2001 Ecology 82(12): 3519-3530.

Alan Krakauer (with Walt Koenig) is our single resident graduate student this winter. Working out of the "caboose" near the Robertson House, Alan settled in after Christmas and starting trapping turkeys. He has wing tags and radios on turkeys from Hastings to Rana Creek Ranch!

Helen Johnson made a generous gift to allow us to continue printing and mailing this newsletter. The newsletter depends on continued outside support, and we appreciate her assistance.

Helen has been a long-time Hastings supporter, and has recently sponsored a study of Monarch butterflies in Monterey County. As an advisory board member of the Ventana Wilderness Society, Mark introduced Helen to the VWS. With Helen's support, an intern who had been halftime with the VWS bird monitoring program went full time by adding monitoring work on wintering Monarch butterfly sites along the coast from Big Creek to Carmel. Seven new sites with over 32,000 butterflies were monitored. We have been consulting on the Monterey County Land Use Plan and have asked, at Helen's prompt, to include the monarch butterflies as important biological resources and special sites. VWS is tagging monarchs (see photo) and if you see something like this, please grab some binoculars and see if you can get a tag number. You can report the monarch sightings to Sarah Hamilton-VWS at 1-877-7740. Helen also sponsored a video on the Monarch Butterfly, produce by Dr. Dennis Frey, CSU-Cal Poly. Helen is still seeking a distributor in that video, but she has made it available to local schools and education groups as gifts. Helen has been an advocate of planting gardens for wildlife, and many native plants, including the milkweeds which are used by

butterflies. Your local nursery may not have them, but Pat Reagan at Rana Creek Habitat Restoration can supply *Asclepias eriocarpa* (broad-leafed milkweed), *A. fascicularis*- (narrow leafed milkweed), and *A. vestita* (wooly milkweed).

Helen has also sponsored several biologists to attend Bat Conservation International's training sessions, including Amy Fesnock at Pinnacles National Monument, who's active bat interpretive program was recently featured in BCI's journal. Mark has been working with both Amy and VWS to install remote video cameras. VWS has a new Condor Cam: (www.ventanaws.org). Amy's bat cam is still in progress. On May 18, bob Benson of BCI will present a talk on bats at the Pacific Grove Museum of Natural History. Be there at 2:30 pm to hear about the Amazing World of Bats



Photo by Paul B. Southerland

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Hastings always could use contributions and if you know someone would be able to volunteer, there are always projects to be done around the buildings. Volunteers and contributions are welcome. Please contact Mark Stromberg.

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Wish List:
Wire-feed welder, 110v.
4-wheel ATV
Pentium Computer for GIS files