

Hastings Natural History Reservation



38601 E. Carmel Valley Road
Carmel Valley, CA 93924
Office: (408) 659-2664
Fax: (408) 659-3649

Reserve Home Page: <http://nrs.ucop.edu/reserves/hastings.html>

Editor, Resident Director- Mark R. Stromberg
stromber@socrates.berkeley.edu

Reserve Steward- Mark Johnson
msjohnso@uclink4.berkeley.edu

Research Associate- David Gubernick
perocal@garnet.berkeley.edu

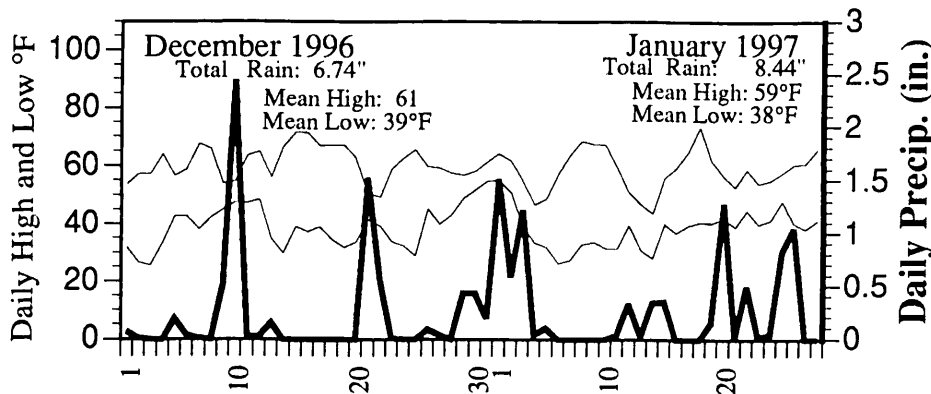
Research Zoologist-Walter Koenig
wicker@uclink.berkeley.edu

Research Associate- Janis Dickinson
sialia@uclink2.berkeley.edu

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



December 1996-January 1997



As floods washed over California, we watched Finch Creek rise to a thundering roar under the Martin Road bridge once again. Blomquist Pond filled in a matter of hours in early December. The mean December high was average, but daily lows were 4 degrees warmer- probably due to the 17 days with rain; 20 days with clouds.

January really brought on the rain. Our annual total is now at 20.48". This could be an annual total most years! Like December, January featured abnormally warm nights (+4°F), but 23 cloudy days and 19 with rain.

Silence is usually one of the most striking features of Hastings. Now, every little gully and stream is alive with noise- splashing, gurgling and running on. Our salamanders are having a great year in all this water. On the warm nights, at almost every pond (even some very little, ephemeral ones), tree frogs have put on a deafening chorus. There is a great rejoicing in all this water. Some sadness too. A new "record" for Hastings's bird list was an immature Double Crested Cormorant. It apparently was able to land on one of the small ponds, but was unable to take off and was found dead by Peter Trenham. The Pacific Grove Museum of Natural History has accepted this specimen and will add it to their display of local birds.

Research: Helen Johnson Supports Salamander Research- Thank-You!

Between the great wet weather, the emphasis of Peter Trenham's last year of field work, and the presence of Peter's field assistant, Katie Kulkjian, there could not have been a better time for a grant from Helen Johnson. Helen's generous support provided another 250 electronic tags we can inject under the skin of the salamanders as well as a new reader we can wave over the salamanders and detect their 15 digit identification. Helen's funds also allowed us to make up 20 signs for the Carmel Valley Road. These are ready now for the late February newt migration back into the forests, reading: "Please Avoid NEWTS (little drawing) Crossing the Road". We should take bets on how long they last; we will only put 3-4 up at a time and just replace them as needed. Our sincere thanks to Helen Johnson.

Walter, David Gubernick and Rickey Wolfe continue to crank through manuscripts for the international bird journal, "The Condor" which is produced here from the Linsdale library. Carol Church and Jeff Parker are working as winter field assistants with Walt on acorn woodpeckers. Walter is preparing at least six research papers and is getting ready to present several invited seminars.

In December, Matina Kalcounis returned from Canada with Andrew McAdam. Matina and Andrew work nights along Robertson Creek and in Madrone Canyon. They are trapping all the deer mice, putting radios on some and making careful observations of their behavior. Matina and Andrew are also following the bats in Robertson Creek with sensitive microphones and recording devices that allow them to identify the bats as they fly over. Matina is using the new GeoNavigator program with her radiotelemetry. She and Andrew each determine a direction (line) to the radio transmitter on the mouse from landmarks on Martin Road that can be seen in the aerial photos in the GIS. Then, they plot the lines in the GIS program which intersect on the mouse location. The program gives them latitude and longitude which are then entered in other software to calculate the home ranges of the mice. Checking some of the distances with measuring tapes reveals that the adjusted photos in the GIS are correct, within 1%. David Gubernick is consulting with Matina and is sharing much of his previously collected information on the California deer mouse in this study site.

Ginger Bolen started trapping the very wary Yellow-billed magpies; once again the canon net is breaking the quiet with an occasional, very satisfyingly loud explosion. Ginger is seeking field assistants for this season.

Janis Dickinson and Jon Akre continue with lab work on the DNA of western bluebirds. Joey Haydock left for a month to learn new lab techniques at Leicester University. Jon is also using GeoNavigator to map the sequential perches used by the Western Bluebirds. Janis and Jon are looking for spatial associations between what later appear to be the parents of the birds in a given box.

Peter Trenhan, UC-Davis, is holding down the Bunk House. Peter is really having a go at the amphibians here. Peter and Katie have now radio-tracked about 10 California tiger salamanders. Once again, Peter finds that the holes of the California ground squirrels are critical to the salamanders. They don't go far (few hundred meters) and tumble down into a squirrel hole. When the salamanders are dug out weeks later, they may be swimming in the flooded burrow, or perched on the muddy floor. Peter is surveying the county road for newts which were marked at Laguna Conejo and other Oak Ridge ponds last year. Some have been found as far as 2 miles from the pond where they were captured. Our newts clearly are moving several miles (1-5?) across hills, creeks and the county road to find Laguna Conejo or Blomquist Pond where they lay eggs and breed. Peter has also documented our local population of Red-legged frogs, Tree frogs, Western toads and the occasional Monterey salamander (*Ensatina*) and arboreal salamanders (*Aneides*). Peter and Katie are using the GPS to map the movements of the salamanders. Tiger salamanders have moved between Blomquist pond and Laguna Conejo (about .4 mi.) have been recaptured at Laguna Conejo in the following year. Peter has tagged about 300 newly captured tiger salamanders this year; 250 at Laguna Conejo and 50 at Blomquist pond. Peter also found that skunks will eat tiger salamanders. Two skunks have been trapped (red-handed) at Blomquist Pond. Each were provided with free transportation, one-way to Arroyo Seco.

People, Places and Habitations: Open House- Saturday May 10

It has been a couple of years since we did this, so we figure it is time once more to invite our neighbors and friends of Hastings to a day where we have our researchers talk about what they are doing and let people look around at the facility. We will host a barbecue lunch and hope we have a warm, dry day! Put it down on your calendars; I will do a mailing with details later on.

Fanny Arnold continues to provide us with a quarterly contribution to help keep up with all the buildings and operations costs. We really appreciate this ongoing help and hope you all can visit with Fanny in May if she can attend the open house.

Mark Johnson and I drove up to the NRS federal surplus yard and returned with a Chevy S-10 pickup. It is in great shape and will replace the Datsun 510 we had been using. Anyone want to buy the little Datsun? Good shape-\$500? Mark was busy keeping up with the buildings and the road during all the rain. Mark and I re-roofed the Museum building after it sprung a leak in January. Mark added the siding to the tractor shed and completely re-organized and cleaned out the workshop. Looking good!

I wrote a proposal to EPA for funds to build four experimental ponds along Big Creek. With great help from Anne and MVZ, we got the proposal through UC. A good learning experience, but it turns out some state EPA bureaucrat rejected it because "we were in the wrong watershed". Isn't it nice to know our proposals are reviewed on their scientific merit? Maybe next year....

Lee Krasnow planted 50 valley oaks at Hastings in December as part of his Eagle Scout project. Other Carmel High students continue to volunteer on Wednesdays; helping with many research projects.

Neighbors Bill Spear, Barry and Toby Fernald, and Becky, Shawn and Chris Flavin all visited Hastings and had quick tours. Chris Flavin is the Vice President of the WorldWatch Institute. Bill and Barry own land near the 17 mile marker and we share an active interest in the natural history of Carmel Valley.

Staff, Visiting Scientists, Students, Field Assistants, etc.

Resident Hastings Staff, Families

Mark Stromberg
Barb Stromberg
Brian Stromberg
Andrew Stromberg
Janis Dickinson
Walt Koenig
Dale Koenig
Phoebe Koenig
Judine Kroetz
Jocelyn Kroetz

Non-Resident Hastings Staff

Mark Johnson
Rickey Wolf

Resident Visiting Researchers

David Gubernick (UCD-Psychology)
Joey Haydock (UCB-Koenig PD)

Resident Graduate Students

Ginger Bolen (UCB-Koenig)
Peter Trenham (UCD-Shaffer)
Matina Kalcounis (U. West Ontario)

Visiting Graduate Students

Lara Hansen(UCD)

Visiting Faculty and Staff

Brad Shaffer (UC-Davis)
Bob Hagen (U. Kansas)

Resident Field Assistants

Jeff Parks (Woodpeckers)
Carol Church (Woodpeckers)
Jon Akre (Bluebirds)
Andrew McAdam (Calif. Deer Mouse)
Katie Kulkjian (Salamanders)

Carmel High Students

Austin Camp
Lee Krasnow
Jenny Waddel
Lilly Woytak
Maia Entropo