

News from the Friends of

# The Bernard Biological Field Station

Of the Claremont Colleges

Volume 3 No. 1 February 2002

P.O. Box 1101, Claremont, CA 91711 (909) 260-4403

www.fbbfs.org

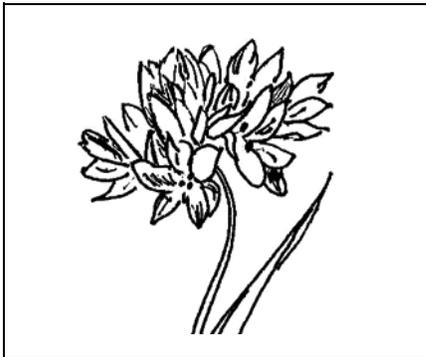
## Village Venture once again a success!

This year we set up both a children's game booth and an information booth. The Chamber of Commerce kindly assigned an information space very near the children's area so setup was a breeze. Both booths were a huge success, doing practically non-stop business and giving us the opportunity to talk to a lot of people about the field station. We even made enough money to cover the costs with a little left over! Thanks to all those who volunteered their time.

and children all participated. They would gather only what was needed, taking the old grandmother bulbs and replanting the young bulblets. These replanted "children" were an offering to Chehoo it, the Earthmother, because she told them that the world is not finished. The people helped finish it by returning the plants to the earth. Tongva and Mehawot were part of a great cycle.

The bulbs of Blue Dicks were eaten raw, boiled, baked, or roasted. They were usually cooked slowly, buried in a rock oven with venison or other game. The leaves and flowers were also eaten. The flowers were used as a soap and as shampoo, and some of the older bulbs were crushed into a paste and used as a paint binder for bow decorations. During festivals in late spring, wreaths of Blue Dicks and *Brodiaea laxa* (Ethuriel's Spear) crowned dancers' heads in the purples and blues of two of the most beautiful flowers of the Tongva world.

## Meet the Inhabitants!

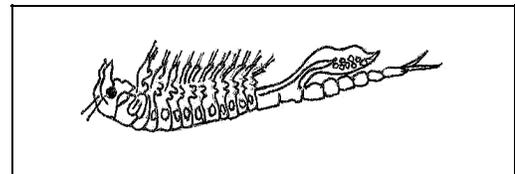


### Blue Dicks

*Dichelostoma capitatum*  
(formerly *Brodiaea pulchella*)

One of the nicest surprises at the Field Station is coming upon a patch of Blue Dicks as you wander around in spring. These perennial members of the Lily family grow from bulbs and are dormant in autumn and winter. They produce long, narrow leaves from the base, and heads of purple-blue, bell-shaped flowers on 2 ft tall, leafless stalks from March through May, and sometimes into July.

Blue Dicks were important to the local Tongva-Gabrieleno tribe. When the hills were covered with the purple-blue of these plants, which they called Mehawot, the Tongva chief would lead his village on harvesting excursions lasting several days up along the foothills from the Santa Monica to the Chino Hills. Men, women



### Fairy Shrimp

(there are many species)

One of the most amusing inhabitants of the BFS is the Fairy shrimp. These small crustaceans live in vernal pools, temporary ponds formed by fall and winter rains. They have 11 to 17 pair of feathery appendages which they use to swim (on their backs!) and to filter bacteria, algae and protozoa from the water. Dormant eggs hatch when the rains come and fill depressions in the landscape, and the animals develop quickly. While conditions are good, they lay eggs and several new generations may hatch. Later in the season, as it gets hot and the pool begins to dry up, the females produce special eggs called cysts which have a tough outer covering. These sink to the bottom where they can rest and survive the hot, dry summer. Sometimes these encysted embryos will emerge the following spring, but they may wait several years before resuming development.

Over 97% of vernal pool habitat in Southern California has disappeared. One endangered species, the Riverside Fairy Shrimp, was brought to the artificial vernal pools here at the BFS before its natural habitat was lost.

## ✓✓✓ Sightings

- The golden currant (*Ribes aureum*) has begun to produce its cheery, yellow blossoms.
- The oaks, alders, and willows are producing catkins, their odd-looking male flowers.
- Our signature plant, (the wild cucumber illustrated in the header), is growing again from its huge, underground rootstocks. Vining branches many feet long and groups of creamy flowers are appearing.
- Scattered bloom on buckwheat in shady areas,
- Those fiddlenecked annuals, yellow *Amsinckia* and purple *Phacelia*, are sprouting after the rains.
- Redtail hawks, Cooper's hawks, and coyotes are out keeping the rabbit, squirrel, and woodrat populations under control.
- Coots and ducks, as well as Western Pond Turtles, are building nests in the edges of the lake.
- The Greater Scaup has been added to the bird list.
- The vernal pools have begun to fill.

## Opportunities / Events

### Help wanted:

- Farmer's Market:** help staff the booth (626-1185)  
**Folk Music Festival:** help staff the booth in May (621-6381)  
**Artwork:** We would love to have you provide (621-6381)  
-drawings for the newsletter  
-drawings for a new coloring book.



**to donate art for the silent auction  
or to suggest possible donors**

please call Kathryn Herrman, 625-5286

### Coming events:

#### The Second Annual Silent Auction

of donated artwork. In spring at the Folk Music Center.

#### Yard Sale April 20

If you have items to donate, please call 625-5286.

### Other:

**Film:** "Contested Land", a student documentary by Lara Glueck about the controversy surrounding plans to build on the BFS. Call Steve Nagler (626-1185) for info.

## Projects carried out on the BFS

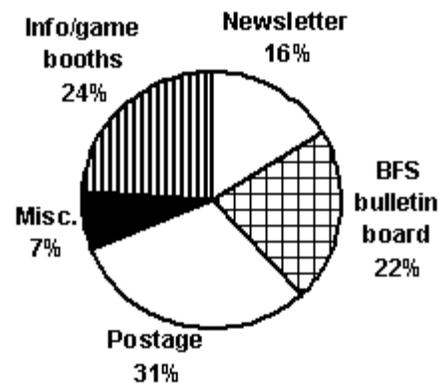
You can view info on past and current projects at the BFS website, [www.bfs.claremont.edu](http://www.bfs.claremont.edu)

It's not only biology classes that benefit from the Station. A group of foreign students from Pitzer's Program in American College English recently took a tour. Their instructor wrote:

*"I can't thank you enough for the wonderful tour of the Bernard Biological Field Station last Friday. The students raved about the beauty of the land and all expressed surprise that such a splendid educational treasure was so readily available to students at the colleges. Your clear explanations helped us understand this complex ecosystem. We all learned a lot!"*

Note: Procedures for community educational use should be in place soon.

## Expenses 2001



It is up to us to make sure that provisions for preserving BFS land are in the future college master plan. Gathering support requires continuous work and depends in large part on our education efforts. **Just \$5 a year will pay for the newsletter and many other activities.**



*"A tour of the property readily convinces visitors of the importance of keeping such a beautiful expanse of land, shrubs, and trees for scientific purposes."*

Robert J. Bernard in "An Unfinished Dream"

The major areas of vegetation found on the BFS can be seen in the map below. The outdoor classroom and the old Infirmary are in the area labeled “Exotic”. This area was landscaped with non-native (exotic) plants when the Infirmary was built. The Manager’s apartment (the old nurses’ quarters) is in this area too, and contains both native and non-native plants in its garden. The Riversidian alluvial fan sage scrub closely resembles coastal sage scrub (CSS) but is even more rare. The oaks along the road were planted by Pomona around the time the Infirmary was built. Although they are now over 60 years old, the conditions are not good for oak seedlings and few can be found here. The oaks in the north occurred naturally, presumably because more water is accessible in this area due to upwelling along an earthquake fault. The willows and alders in the riparian forest around the lake are quite large now and provide nesting and roosting habitat for many birds, as indeed does much of the other vegetation. The upper half of the eastern portion of the BFS was once a citrus orchard and is now grassland slowly returning to CSS. After the rains in spring, vernal pools appear in artificial shallow depressions around the lake edge. During the brief period when water is present, many short-lived animals and photosynthetic organisms can be found in them.

