

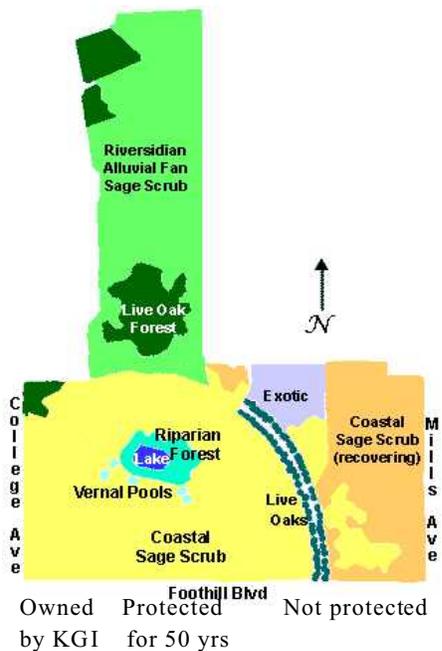
Friends of the Bernard Biological Field Station  
P.O. Box 1101  
Claremont, CA 91711  
*The Friends is a non-profit, grassroots organization.*

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**Permit No. 23**

[www.fbbfs.org](http://www.fbbfs.org)

*“Dedicated to Education  
and the Environment”*

**City of Claremont:** [www.ci.claremont.ca.us](http://www.ci.claremont.ca.us) click on “contact us”  
P.O. Box 880, Claremont, CA 91711  
City Clerk: 399-5460  
**Claremont Colleges:** [www.claremont.edu](http://www.claremont.edu)  
**The Claremont Courier:** 111 S. College Ave, Claremont CA 91711  
Phone: 621-4761  
**Inland Valley Daily Bulletin:** 2041 E. Fourth St, Ontario CA 91761



## How big is big enough?

A field station is land left in its natural state for use in the study of complex interactions between plants and animals. The usefulness of such natural laboratories depends on size and shape. Extinctions occur frequently in small areas, due to smaller populations. The current 85 acres is just large enough to maintain reasonable stability in the existing ecosystems. Narrow shapes increase the amount of pollution by noise, air, water, and pesticides from surrounding areas, and increase the chances of competition from exotic (non-native) species.

## Who uses it?

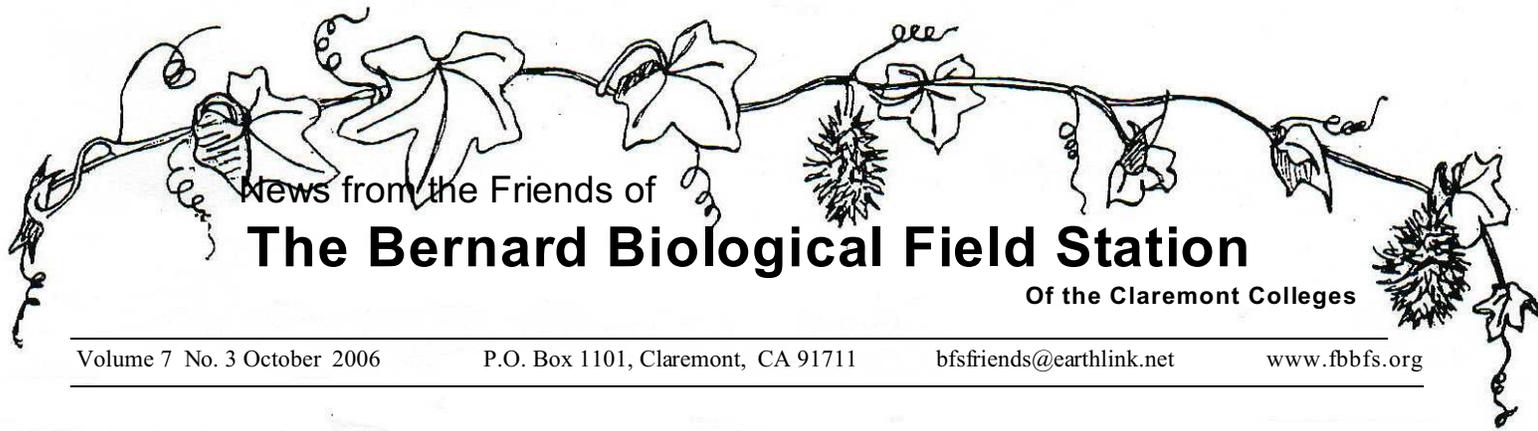
The BFS is used by Claremont Colleges faculty and hundreds of students every year, as well as by many schoolchildren from Claremont and the surrounding areas. It has also been used by college classes from as far away as Long Beach, by scout troops, and by members of the public.

## What's there?

There are over 30 acres of the fast-disappearing coastal sage scrub community along with a number of species of state or federal concern.

*Since much of Claremont was originally covered with coastal sage scrub, it is a fascinating window into our past.*

There is a stand of oak woodland in the north where water wells up along an earthquake fault, there is annual grassland slowly returning to coastal sage scrub in the east, and there is a one-acre, man-made lake excavated in 1978 which is a sanctuary for western pond turtles displaced by development.



News from the Friends of

# The Bernard Biological Field Station

Of the Claremont Colleges

Volume 7 No. 3 October 2006

P.O. Box 1101, Claremont, CA 91711

bfsfriends@earthlink.net

www.fbbfs.org

## Village Venture

If you can spare an hour or two to help with our game booth between 10 and 4 on October 28, please send us an email

## ✓✓✓ Sightings

- thousands of young mosquito fish making overlapping circles in the lake
- tiny, round-leaved duckweed floating on the surface, nestled in rafts of algae
- a rope across the lake, bright with tassels of red flagging tape, ready to hold boats of students steady
- bright green pinebush contrasting with dormant, brown sagebrush
- flashes of white as startled bunnies flee
- dozens of young, gray lizards darting across the dusty roads
- busy bees, honey and native, at the bright yellow pinebush and scalebroom flowers
- harvester ants surrounding nest openings with garlands of russet buckwheat petals
- hungry hawks soaring overhead
- Toyon berries ripening, buckwheat heads full—food for the fall
- bright red and yellow leaves of poison oak, looking decidedly decorative
- seemingly haphazard piles of sticks at the bases of bushes--woodrat nests!
- white tufts of coyote brush flowers decorating the lake edge

## Local Measure S

Measure S asks Claremont voters to approve a general obligation bond to purchase Johnson's Pasture so it can be added to the Wilderness Park.

In keeping with the Friends' motto ("Dedicated to education and the environment"), the FBBFS Board of Directors is in unanimous support of this measure and urges all of you to vote for it on November 7.

The bond is supported by all members of the City Council, the Claremont Wildlands Conservancy, the League of Women Voters, Claremont Heritage, the Claremont Colleges, and many other organizations.

In June, an assessment district to fund this purchase failed. Many voters supported buying Johnson's Pasture but opposed that funding mechanism and wanted a bond instead. The City has responded by proposing this general obligation bond.

**Some of those who did not support the assessment district but who strongly support Measure S are:**

Tom Andersen, Bob Bowcock, Corey Calaycay, Conrad Casler, Valerie Gustaveson, Richard Hall, Diane Heckers, Doug Hjelm, Linda Kovach, Tom Lamb, Julie Lannom, Jackie McHenry, Barbara Miller, Gary Mizumoto, Opanyi Nasiali, Mary Noonan, Joseph O'Toole, Darlene Rota, Joseph Salas, Mike Skapik, Nora Vignoli, and Larry Woodruff.

**Some of those who supported the assessment district and who strongly support Measure S are:**

Geordeann Andrus, Sandy Baldanado, Lisa Beckerr & Dennis Berger, Jill Benton, LindaRick Elderkin, Howard and Evelyn Gault, Helaine & Steve Goldwater, Michael Heilpern, Sue Keith, Jim & Mary Jane Merrill, Art Parker, Sam Pedroza, Lissa Petersen, Kirk Reynolds & Carla Jackson,, Diann Ring, Susan Schenk, Susan Seymour, Beverly Speak, Suzanne Thompson, Judy Wright and Peter Yao.

**Johnson's Pasture is a community resource** of beautiful, peaceful, natural habitat at the north end of Mountain Ave which has been enjoyed by Claremont residents for 100 years.

**The owners want to sell it to the City.** If we don't buy it, they will seek developers

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#### **Preserving Johnson's Pasture will**

- Increase the Wilderness Park and help establish a wildlife corridor in the foothills.
- Avoid huge new homes being built in an area prone to wildfire.
- Save taxpayers the burden of paying for the services new homes would need.
- Enhance Claremont's reputation for livability and increase property values.
- Maintain precious watershed and water quality.
- Preserve native habitat and biodiversity.
- Ensure that future generations will be able to visit and hike there.

#### **Measure S is a general obligation bond**

- Which would be used solely for the purchase of Johnson's Pasture.
- It would authorize the city to sell a maximum of \$12.5 million in bonds.
- The \$12.5 million covers the cost of the land plus the cost of financing the bond, minus a grant from the county and a donation from the Claremont Wildlands Conservancy.
- If the owners reduce the price, there is a good chance we will get a grant for \$1 million from the state which will reduce the cost.
- The Claremont Colleges have pledged to donate the same amount of money they would have paid under the assessment district if Measure S is passed. This would reduce the cost to taxpayers.
- The bond would be paid off in 30 years, or fewer if more grants or other funding sources are found
- Over this time, the cost to property owners in Claremont would average no more than \$25 per \$100,000 of the assessed value of their property at the time the bonds are issued (the cost would start at about \$34 per \$100,000 and reduce to about \$18 at the end of the financing period)
- Based on the latest L.A. County property tax rolls, about 80% of the single-family homes in Claremont are assessed at less than \$400,000, so the average yearly cost to the great majority of homeowners over the life of the bond would be less than \$100.
- The bond money cannot be used for anything other than purchasing the pasture.

**For more information, to donate, or to volunteer:**

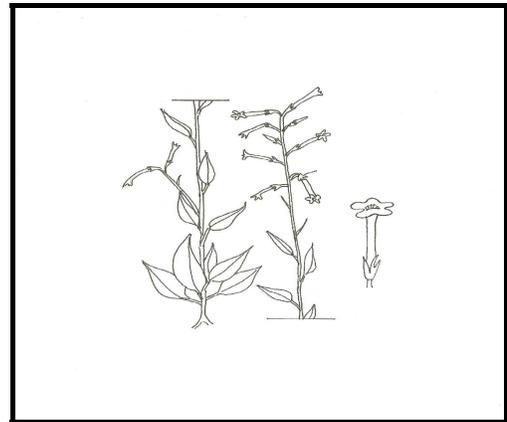
[www.yesonmeasures.org](http://www.yesonmeasures.org)

[johnsonspasture@yahoo.com](mailto:johnsonspasture@yahoo.com)

Yes on Measure S, P.O. Box 1931, Claremont CA 91711

(909) 972-1634

## **Meet the Inhabitants**



**Annual Tobacco**  
*Nicotiana attenuata*

Annual tobacco appears in summer in disturbed areas on the BFS. The plants are delicate-looking, with leaves that are slightly sticky and hairy, and white tubular flowers with slight green and pink tinges. Plants are generally under 1 ½ feet tall, and are narcotic and heavy-scented.

According to legend, early in the creation of the world, Weywot (Sky Father) gave the Tongva tobacco (paspebat) and made little soapstone pipes. At first only shamans used this sacred plant but eventually it was given to all the people.

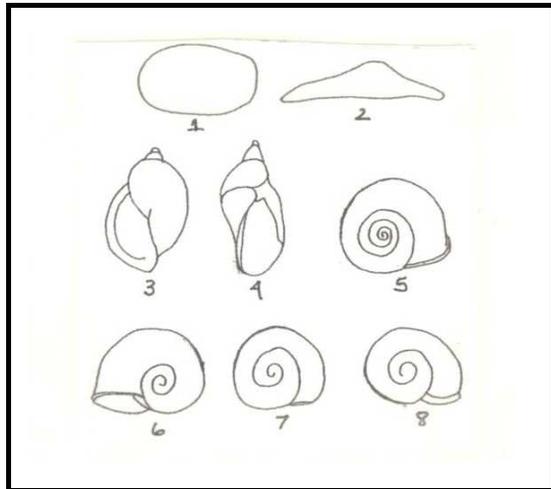
Tobacco was smoked by ritual leaders and shamans before ceremonies. The smoke was blown to the four directions and up for the center.

Healers used tobacco. The leaves were bruised and placed behind the ears and tied to the temples as a quick cure for headaches. Leaves were also crushed and made into poultices for bites, sores, and cuts. A water drink of tobacco was used as an emetic to induce vomiting. The seeds were crushed and used to ease toothaches and crushed into a liniment for rheumatic swellings.

Bunches of tobacco were placed in sweathouses during curing ceremonies and smoke was blown into ears for earaches.

Most elders, both men and women, smoked on a daily

basis. Tribal members who were about to embark on a journey or traders about to leave on their cross-country business smoked, blowing the smoke in the direction they were going. Hunters often smoked prior to the hunt and blew smoke on each other to purify themselves.



## Snails

We were fortunate in having had Dwight Taylor, a noted snail expert, look for snails at the Field Station. He found seven native species.

Snails are molluscs, like squids and clams, and are in the class Gastropoda. Snails have a shell attached to the body by strong muscles. They contract these muscles to withdraw into the shell. The shell protects them from predators and prevents dessication in land snails. Shells are built up in layers and require calcium so snails are often found where this element is abundant. Some snails, like *Haitia* (3), have shells that coil to the left, and some, like *Pseudosuccinea* (4), coil to the right. These two snails are long and pointed (“high-spired”) while others, like *Planorbella* (6), are flattened.

Snails move using a large, muscular foot, secreting mucus to make gliding along easier. They scrape algae off rocks, or devour leaves, with a hard structure called a radula. Aquatic snails have gills, but land snails have lungs. They have an open circulatory system in which blood flows into the cavities surrounding their organs to deliver oxygen, rather than a closed one like we do where the blood moves in vessels. Snails have four (sometimes two) antennae with eyes on the ends of the longer pair.

Some snails have males and females, but most are hermaphrodites, and most lay eggs.

One snail at the BFS belongs to the genus *Ferrissia* (1 top view, 2 side view). These have a volcano-shaped shell and look like the limpets you see at the beach.

They have lungs, but also have an outgrowth of their skin called a pseudobranch which helps them breathe.

Snails are basically animals of moist habitats, but some can live in areas that are dry much of the year. On the BFS *Helminthoglypta tudiculata convicta* (5) is found under old prickly pear pads where there is an accumulation of soil. During the dry season, the snails burrow into the ground where they can survive for months.

Next to the former Infirmary, there is a deep accumulation of leaves and humus underneath the oaks. Beneath dead wood, the soil retains some moisture and provides habitat for earthworms, centipedes, and the tiny land snails of the genera *Punctum* (7) and *Vallonia* (8).

## Teachers and Group Leaders

The spring is a great time to visit the BFS!

To arrange a visit,

call (909)625-8701

or fill out a use form online

## The CGU Housing Project

The project seems to be on hold. Signs have appeared on the fence around the western section that say “Keck Graduate Institute North Campus Property”. No mention of it being a field station.

## General Plan Update

The Planning Commission has approved the EIR for the General Plan and will soon approve the draft of the Plan. You can see the Plan at ([www.ci.claremont.ca.gov](http://www.ci.claremont.ca.gov)) or you can purchase a CD from City Hall. Hard copies are available for reading at City Hall, the Hughes Center, the Joslyn Senior Center, and the library. The draft will be sent to the City Council for final approval. The City hopes to have the new Plan approved in November.



**“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. Bemard in “An Unfinished Dream” pg 708