

PITZER COLLEGE

US Address:
Firestone Reserve
c/o External Studies,
Pitzer College
Claremont CA 91711

Email:
Carol_Brandt@pitzer.edu



THE WATER
QUALITY LAB

Water Quality.

Water supply and water quality are critical issues in the immediate area surrounding the Firestone Reserve. Rapid development demands ever larger supplies, even as septic tank run-off and soil erosion threatens the quality of existing sources.

Professor Cheryl Baduini and her students have begun studies of the hydrology and bacteriological quality of local streams and rivers, and expect to expand the scope of their studies in the future. Preliminary results have revealed significant levels of coliform bacteria in some water courses, and a clear relationship between ecosystem integrity and sediment run-off. The forthcoming Installation of a continuous water level logger will be the first step in correlating these factors with daily rainfall patterns.

Further Information

The Reserve website, which contains more technical details, is at:

<http://costarica.jsd.claremont.edu>

Information on the design of "The Hooch" can be found at:

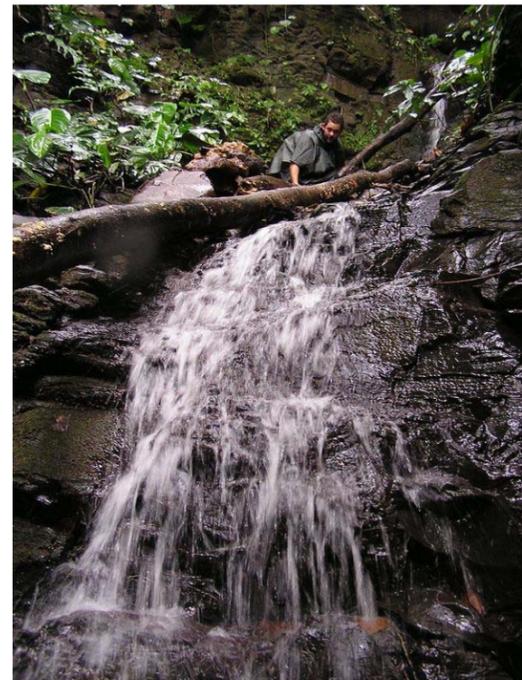
<http://tropical-treehouse.com>

Information on bamboo design can be found at:

<http://deboerarchitects.com>

Information on the adjacent Hacienda Baru Reserve is at:

<http://haciendabaru.com>



WATER SAMPLING



Pitzer College

**NEWSLETTER OF THE FIRESTONE CENTER FOR RESTORATION
ECOLOGY, BIOLOGICAL RESERVE,
COSTA RICA**

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Bamboo Construction Projects



THE HOOCH; A BAMBOO OBSERVATION DECK DESIGNED BY JO SCHEER

In March 2006, work began on two significant construction projects intended to showcase the use of bamboo as an innovative, sustainably-

produced building material. The first of these buildings, "The Yoga Pagoda" is an open sided design by Darrel DeBoer of san Francisco in collaboration with Costa Rican bamboo builder Martin Coto , and occupies the ridge top ocean view site cleared by the previous owner. The project employed a large number of 10 m bamboo poles grown and harvested on the property, and was assembled by a large

group of US and Costa Rican volunteers, together with Pitzer's Spring 'Semester in Costa Rica students and our full-time Reserve employees.

The second project was the construction of an observation tower, "The Hooch", designed and built by Jo Scheer with an enormous amount of help from Clem Jauquet and Pete Fust.

SPECIAL POINTS OF INTEREST:

- ◆ A new observation tower has been erected.
- ◆ A new bamboo pavilion has been built.
- ◆ A lab, classroom, and dormitory facility are under construction



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Ecology Center construction underway

Even as work continued at a frenetic pace of the bamboo projects, local contractor Johnny Segura began work on the conversion of the old barn into our new Ecology Center and student dormitory.

actually consist of two buildings. The



first comprises the laboratory, classroom, secure storage room, and toilets. The second building, immediately adjacent, is a renovation of an

existing living space into a 12 bunk student dormitory, with covered outdoor kitchen and lounge



area. The facility comes complete with a wa-

Granular Poison Dart Frog, Dendrobates granuliferous.



Photo by Keith Christenson, June 2005

Inside Story Headline



Photo by Keith Christenson, June 2005

CRITTER
GALLERY

A SELECTION OF THE
BEST NATURAL
HISTORY
PHOTOGRAPHY FROM
THE RESERVE

Mapping the Reserve.

The basis of any sound conservation strategy is a good map. The previously available map of the reserve, completed as part of the conservation easement, was inadequate for our research needs. The first project undertaken by the 2005 summer research students was an extensive topographic survey of the property. Under the supervision of

Keith Christenson and Donald McFarlane, Christopher Wheeler, Emily Haber and Elspeth Llewellyn mapped more than 7 kms of trails and bush. After computer processing, a very respectable 3D error of better than 1.5% was demonstrated. More surveying remains to be done, and the 2006 summer research students will take this on in June.



Ignorance more frequently begets confidence than does knowledge: it is those who know little, and not those who know much, who so positively assert that this or that problem will never be solved by science.

Charles Darwin

