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

Bamboo Construction Projects

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 Delre 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 Seheer with an enormous amount of help from Clem Jaquet and Pete Fast.

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.

The final product, which is expected to be complete by May 1st, will 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...
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