Thanks

Partners





# Table: News

News1The first Hooch in South America was built atActivities2last in the Bigal River Biological Reserve!Activities2It will be used as an observation tower with a breathtaking view on the Sumaco volcano andBio-logical corner3the surrounding canopy.Contact and links4Thanks Joe Scheer for this amazing design!



## **Activities**

#### 2nd workshop about bamboo construction

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April the 15th through 21st 2010, Bigal River Biological Reserve with. INBAR Ecuador.

Objective: Learn construction techniques with native bamboo in order to lesser environmental impact in the area.

Joe Scheer's design was used for the practical part of the workshop, the idea was to adapt the model in the Bigal River Biological Reserve and learn about efficient building techniques in a very remote area.









## **Activities**

# Conserving the Cerulean Warbler's winter habitat in Ecuador

Third Workshop: March 26 & 27 of 2010

Park Ranger Station 8 de Diciembre – 10 participants

Third Monitoring: March 28, 29 & 30 of 2010

Bigal River Biological Reserve – 4 participants

*Objective*: promote Forest Conservation in the Sumaco Napo-Galeras National Park's buffer zone.

#### Activities:

- Bird's observation and identification through monthly participative monitoring. 273 birds identified so far!
- •Elaboration of diffusion material.





### Classes La Puyo local community's school

Fiscal School Cabo. Gonzalo Montesdeoca — 12 students de 6 a 12 years old.

#### Activities:

- English classes
- Environmental education

*Objective*: Share our knowledge. Collaborate in the education of children in the Project working area's vicinity.





### First aid response and tree climbing techniques

First workshop: April 10 & 11 of 2010

Loreto – 14 participants

Lecturers: Firefighters of the City of Loreto.

Objective: prepare community and Project's members on know how to react in case of an emergency situation.

#### Activities:

- First aid's techniques
- Climbing techniques and practice



#### Natural resources management workshop

February 10th to 15th of 2010, Tena, Napo Province.

Lecturers: Ambiente y Sociedad

#### Activities:

- Crafts with seeds and natural fibers workshop
- Recycling paper making
- Making of potteries



Photos Karol Fierro





# Bio-logical Corner

Leaf-cutter ant and their fungus: a unique example of co-evolution.



Leaf-cutter ants live in underground colonies of more than 8 million individuals and are unique to the Neotropics. When they are seen within the forest, it is usually by the thousands, transiting along one of their highway-looking trails, each one carrying a freshly cut piece of leaf to maintain their very special garden.



Those ants are part of a larger group of ants which devote themselves to growing fungi in order to feed their entire colony.

For instance, the ants never collect leaves which could hurt the fungi, since lots of plants contain chemicals that could damage the fungi. For this reason a careful examination is made to optimize the culture and leaf selection is crucial.

In most cases, the relationship between the ants and the fungus is as old as 50 million years. The fungi cultivated by the ants is their only food supply and has never been found growing anywhere else than in the ants nests. The fungus provides them with the perfect feeding source as it enables the ants to avoid feeding directly on forest's plants, which usually contain chemical defenses protecting them from depredators.

The ants work continuously to preserve the fungi: First they select the leaves, cut them, and carry them to the nest; then they chew the leaves and build a bed to grow the fungi; next they keep the culture clean and infection free by weeding and cleaning; finally, they fertilize the bed with their stools which contain the exact nutrients and chemicals needed by the fungi



for its growth. When a queen leaves a nest to start a new colony, she always bring some fungus samples, without which the survival and spreading of both species (the fungus and the ants) would prove impossible.

We are dealing with a perfect case of symbiosis and an unavoidable one as if the fungus dies, the ants also die and vice versa. For this reason the Leaf-cutter ants are very successful and very common in the rainforests of the Neotropics, all thanks to the fungus.



Centro Agricola

Rosalino Olalla y Mateo Puraquilla

Loreto - Ecnador

Cel (porta): (00-593)-(0) 89-306-988

(movi): (00-593)-(0) 87-105-383

E-mail: sumacmuyu@gmail.com

### We're on the Web!

http://reservadelriobigal.googlepages.com

# MEMBERS:

We welcome Xavier amigo as a new institucional member of the Sumac Muyu Foundation.



More than 1400 species photos from the Reserve are available to enjoy on Flickr.com.

Support the BRCP by visiting the following link:

http://www.flickr.com/photos/bigal\_river\_conservation\_project\_ecuador/sets/

# Thanks!

We wish to thank the following organizations for their support and generosity:







### View of the Sumaco Volcano from the Reserve's Hooch.











## Our Partners













experience

