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## A Guide to Fieldstations in the Tropics III. Colombia

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### 1. "El Refugio" Biological Station Chocó Biogeographical Region, Colombia (Information for 1989)

"El Refugio" Biological Station will be open as of Juni 1989 for persons or organizations of all nationalities. The station offers logistic support for activities with educational, conservational or research purposes. The station is located in a mountainous region at elevations of 1600 to 1900 m, on the western versant of the western cordillera of Colombia. It lies 23 km away from Cali (see below), on the road to Buenaventura, the most important road crossing the Chocó biogeographical region (Buenaventura is the most important seaport on the Colombian Pacific coast). The biological station includes 14 ha of relatively undisturbed, species-rich forest, and 9 ha of open lands. The latter include orchard, pasture and garden areas. "El Refugio" is owned by a colomian family concerned with the conservation of natural resources and especially with endangered plant species. Since its acquisition 10 years ago, the open areas have been considerably enriched with numerous living collections of andean plants.

Cali is the capital of the Valle Department of Colombia, and the third largest city of the country (ca. 1 million inhabitants). It lies in the Cauca River Valley (at elevation of 1000 m), between the central and western cordilleras, and has an average temperature of 26 - 28° C. Multiple shopping and entertainment facilities are present

in Cali.

#### 1. Description of the Station Facilities

##### A. Administrator and personnel

The scientific director and administrator of the station is a colombian biologist prepared to advise and help guest scientists and students. He speaks English, German and Spanish.

##### B. Capacity and availability

The station can accomodate, simultaneously, a maximum number of 15 guests. The station is available year round, excepting Dec. 15 through Jan. 15.

##### C. The house

The house is a modern and comfortable construction in spanish style. It has running water (from its own spring in the neighboring forest!) and electricity (110 volt.). Telephone is not available at the station, but public phones can be found in the vicinity, including international service. The following facilities are available for station guests:

- living room with fire place
- dining room with capacity for 10-12 persons (kitchen seats additional 4 persons).
- large kitchen provided with an electric stove (with 5 burners and oven), refrigerator and freezer. Additional cooking facilities with a petroleum stove are also available.

- laundry room with an electric washing machine and ample facilities for hand-washing.
- two bathrooms with lavatory and shower (warm water available).
- four bedrooms.

Equipment for pressing and drying plants is also available at the station.

## 2. Station Fee, Lodging and Board

A station fee of U.S. \$ 2.00 / person / week is charged to all those using the station (independently of lodging costs).

Accommodation costs range from U.S. \$ 5.00 to 15.00 / person / day, depending on the number of persons sharing a bedroom.

Groups of students (college field courses, etc.) sharing bedroom by threes or fours, pay U.S. \$ 5.00 / person / day.

Guests bring and cook their own food. Dish washing is also responsibility of the guests. Kitchen utensils and tableware are available at the station. If necessary, groups can be assisted by the administrator for provisioning. Nearby shopping possibilities are rather limited. Best shopping opportunities are in Cali (approx. 25 km away). The costs of self-provisioning are approximately U.S. \$ 1.50 - 5.00 / person / day. There is also the possibility of visiting nearby restaurants (3 to 10 km away); they cost about U.S. \$ 1.5 - 4 / meal / person.

## 3. Transportation

Transportation from the Cali International Airport to "El Refugio" Biological Station is possible by bus, via the "Central de Transportes" (bus station) in Cali. Taxis, as well as rental cars are also available (the latter cost about U.S. \$ 50.00 - 60.00 / day). Transportation by bus is not recommended if too much baggage is brought. Arrival at the biological station during the day is desirable.

### A. From the Airport to the "Central de Transportes" in Cali

It is possible by bus (fare approx. U.S. \$ 5.00 - 10.00). All busses leaving the airport for Cali

have the "Central de Transportes" as their end station. At this station, all the intermunicipal buslines are to be found. Further transportation is then possible in all directions, including to "El Refugio".

### B. From the "Central de Transportes" to the Biological Station

The "TRANSUR" busline ("Empresa de transportes TRANSUR") is recommended. Take the bus from Cali to Dagua (there are several trips a day). The ticket can be bought at the TRANSUR counter. Please ask for a ticket to the km 23 of the road (roughly the half way between Cali and Dagua). Sometimes, the full ticket to Dagua must be paid. The ticket costs around U.S. \$ 1 / person. The station is located at the km 23 and is recognizable through the sign "El Refugio Torremolinos" (known in the region as "Finca Torremolinos"). The house of the station is located some 130 m from the entrance.

### C. From the Biological Station to Cali

Return trip usually with a bus of the same busline (TRANSUR), on route from Dagua to Cali. The bus stops some 40 m down the road, from the entrance of the biological station. Busses pass approx. every 30 min (only during the day).

## 4. Climatic Information

Annual precipitation at the station is between 4000 and 5000 mm. Precipitation is frequent and mostly nonseasonal. However, it is usually less abundant (without guarantee!) from 15 Jul. to 30 Aug. and from 15 Jan. to 15 Feb., than during the rest of the year. April-May and October-November are usually rainy months. Temperatures during the day are between 16 and 24°C, in the night 6 - 16°C. Seasonal fluctuations in temperature are negligible. Heavy fog is common in the afternoon and evening. Rain jackets or similar are recommended, as are light boots (humidity-resistant) and sweaters.

(data in this paragraph apply only to the biological station; climatic conditions 20 km away can be completely different; for additional climatic

information of the region see: West, R.C.: The Pacific Lowlands of Colombia. Louisiana State Univ. Studies, Social Sci. Ser., Nr. 8. Baton Rouge, 1957).

### 5. Additional Information

Reservations are recommended, especially for large groups. Long-term investigations must be approved by the scientific direction of the station. Agreements can be made to fit special or individual cases. If necessary, the administration can help in looking for special transportation means. The administrator can also assist in looking for guides or organizing visits to neighboring areas, for instance trips to the Pacific coast, tours to the xerophytic region near Dagua, etc. Malaria is a potential for those visiting the coastal lowlands (at the station, such danger can be almost excluded).

Scientific Director and Administrator:  
Eduardo Calderon  
Calle 44A, 4N-105, La Flora  
Cali, Colombia

#### References:

- Gentry, A. 1986. Species richness and floristic composition of Chocó-Region plant communities. *Caldasia* 15: 71-91.
- Gentry, A. 1982. Phytogeographic patterns as evidence for a Chocó-Refuge. In: *Biological diversification in the tropics*. (Ed. G.T. Prance), pp. 112-136. Columbia Univ. Press, N.Y.

### 2. Fieldstation Guaca

Location: Guaca (6° 20'N, 77° 20'W), Serranía del Baudo, Chocó. Next town Bahía Solano. Accessible only by airplane to Bahía Solano. From there 2 hrs by boat and 3 km by foot. Guests can be picked up at Cali or Bogotá airport and accompanied to Guaca.

Habitats: very humid rainforest (annual precipitation more than 12.000 mm), mangrove, rivers, coral reefs. National Park Ensenada de Utria in 18

km distance.

Description of station: only roofs; facility for camping; no electricity.

Costs: 15\$ per person and day, inclusive all meals with local food and fieldguide.

Contact Address: Rudolfo Ospina, Transversal 57A No. 991-10, S.F. de Bogotá, Colombia.

*(translated from the newsletter of the German Society for Tropical Ecology no. 10, January 1992).*

### 3. Estación Biológica "Alexander von Humboldt"

Location: Bajo Anchicayá, Dept. del Valle, 3° 46'N, 77° 10'W on the W-slope of the western cordillera, southern Chocó. Next towns Cali (80 km) and Buenaventura (40 km). The Station was opened in February 1991 and is situated on the area of the hydroelectric plant CHIDRAL. The station is operated by the Museum Alexander Koenig, Bonn, Germany, in cooperation with Central Hidroeléctrica del Rio Anchicayá Ltda., CHIDRAL, Cali.

Description: Stone house with 120 m<sup>2</sup>, 2 sleeping rooms for 6 persons, 1 library, 1 kitchen, 1 bathroom, all with air condition. Electricity 220 V. All services of CHIDRAL are also available for guests (car-repair, health-care).

Habitats: Evergreen rainforest 200 - 700 m elevation, ca. 160.000 ha of primary forest. Mean temperature 25-27°C, mean annual precipitation 12.000 - 19.000 mm. Other accessible habitats are cloud forests in 1000 - 3000 m elevation, Polylepis forest in 3000 - 3500 m, and páramo (3500 - 4300 m, National Park "Los Farallones").

Costs: \$20 per person and day inclusive meals. A 4x4 car can be rented for \$ 10 per day.

Contact: Dr. K.-L. Schuchmann, Ornithologische Abteilung, Zoologisches Forschungsinstitut und Museum A. Koenig, Adenauerallee 150-164, D-5300 Bonn 1, Germany, phone X228-21 10 26-28, Fax X228-21 6979.

*(translated from the newsletter of the German Society for Tropical Ecology no. 7, December 1990).*

ción, Reserva Natural La Planada, Apartado 1562, Pasto, Nariño, Colombia.

*Written by Cristian Samper K., taken from Tropinet vol. 5:3, 1990.*

#### **4. Reserva Natural La Planada**

La Planada was created in 1982 by agreement between the Fundación para la Educación Superior and World Wildlife Fund. This rainforest reserve is located on the western slope of the Andes in southwestern Colombia (Nariño Department). The montane forests of the Andean Pacific slope are characterized by abundant rainfall and cloud cover. Annual rainfall exceeds 5000 mm; July and August are the driest months. The reserve is often enveloped by clouds that fill the forest with a fine mist and support an extraordinary array of epiphytes. Forests in and near La Planada are noted for high bird endemism and are thought to contain the highest diversity of amphibians in the world. Both lowland and highland species occur in the area.

The forested 3800 ha reserve is part of a continuous strip of forest stretching from near sea level to 3500 m; La Planada itself is located at 1800 m elevation. The reserve boundaries encircle a large, flat plateau with ridges varying from slight grades to very steep slopes. La Planada is an excellent location for field research in montane forest of the western Andes (Chocó biogeographic region). The reserve's location on the road from Pasto to the port of Tumaco enables researchers to reach sections of the forest at various elevations, offering excellent opportunities for comparative studies along an elevational gradient.

La Planada is easily accessible from Pasto and has accommodations for ten resident researchers in single rooms, plus space for 20 visitors, including field classes. There are basic laboratory and computer facilities. Visitors and inquiries are welcome. Information: Programa de Investiga-