

# INTRODUCTION

This information packet is intended for distribution to college and university professors, biology teachers, graduate students, and other professional persons who are interested in leading biological field courses (or less formal, eco-tourist groups) to the Amazon rainforest. The information presented here provides prospective group-leaders a broad overview of the facilities and services offered by the Librarius Study Center and the Jatun Sacha Biological Reserve.

The Librarius Study Center ("LSC") is a new field-course facility located at the Jatun Sacha Biological Reserve in the lowland rainforest of Amazonian Ecuador. The LSC was specifically designed to comfortably support long-term university-level course groups (up to 25 persons, with classroom, lab, and library). The name "Librarius" is taken from the name given to a new species of frog - *Eleutherodactylus librarius* - first collected at Jatun Sacha in 1986, and underscores the mission of the Librarius Study Center as a place devoted to the study and conservation of the Amazon Rainforest. Following a period of construction and development spanning nearly three years (1998-2001), the LSC now takes its place as the newest addition to the already outstanding facilities of the Jatun Sacha Biological Reserve.

## LOCATION: THE MEGA-DIVERSE "NAPO REFUGIA" OF AMAZONIAN ECUADOR

The rainforest of the LSC borders the Napo River and is crossed by small streams and fluvial swamps; this relatively small, 14.5 hectare plot of floodplain forest is surrounded and supported by the much larger, 2200 ha Jatun Sacha Biological Reserve. Jatun Sacha is the largest non-governmental rainforest reserve in the upper Amazon Basin, includes all habitat types found within the region (with the exception of lakes), and is easily accessible by road (a spectacular 6-hour descent of the Andes from the capitol of Quito).

Located in the heart of the mega-diversity "hot spot" region of the upper Napo River basin (the "Napo Refugia"), the flora and fauna at Jatun Sacha is among the most biodiverse known for any single site worldwide, and includes (so far) 545 species of birds, 143 species of amphibians and reptiles, 800+ species of butterflies, and more than 1500 species of vascular plants (among taxa surveyed; most other groups have yet to be inventoried, as is the case with many Amazon rainforest sites).

Thousands of people from around the world have visited Jatun Sacha since its founding in 1985; in addition to extensive primary forest (with more than 35 kilometers of well-marked and maintained trails), the reserve also features the Center for Amazon Plant Conservation (botanical gardens and research facility), the Alinahui ecotourist lodge, four forest observation towers (treehouses and canopy tower), a canopy walkway, a bar/nightclub, and a central headquarters building housing the dining hall, offices, and gift shop. A large permanent staff operates the facility year-round (including English-fluent administrators), ensuring that you and your students are well cared-for and have the best possible experience in the Amazon Rainforest. For more information on the web about Jatun Sacha and the Jatun Sacha Foundation (which also owns and administers three other biological field stations in other parts of Ecuador), see: [www.jatunsacha.org](http://www.jatunsacha.org).





## OUR MISSION - CONSERVATION, RESEARCH, AND EDUCATION

The LSC strives to promote conservation through education, with ample opportunities for research along the way! Every person who visits the Amazon rainforest, with the purpose of learning and understanding, later becomes a teacher (at some level) who can impart knowledge - and hopefully admiration and concern - about rainforest conservation. For some it may amount to no more than vacation memories, while for others it may lead to a lifetime of study and teaching.

The extraordinary biodiversity, size, and accessibility of the Jatun Sacha forest, combined with the facilities of the Librarius Center and the Jatun Sacha Station, together allow all participants to comfortably benefit from the experience to their full potential.

Depending on the specific interests of the faculty, it is also possible to incorporate research projects into courses by having students assist with labor and data-gathering. Much remains to be learned about this most diverse and endangered rainforest (even at the level of species inventory for some taxa), and efforts to study unknowns are especially welcomed.



## A "USER-FRIENDLY" FIELD COURSE BASE

The LSC can accommodate up to 25 persons in three spacious and comfortable buildings, all set within the forest a short walk from the main Jatun Sacha dining hall to the west and the JS pub "El Laboratorio" to the east (serving cold beer, snacks, music and dancing). While staying at Jatun Sacha, your course group occupies the LSC facility exclusively, without the distractions of having to share with other persons outside your group or the need to rely on the daily assistance of staff members.

At LSC you command a self-sufficient field station where all facilities and equipment are readily at hand from the moment you arrive until your departure (while having help available just up the road if needed). The nearby dining hall serves up three hearty meals a day; participants only need to arrive at the appointed times and eat, allowing maximum time for course activities (box lunches can even be ordered for day-trips).

The LSC was, from its inception, designed to be a user-friendly (and especially instructor-friendly) facility where any biology teacher or naturalist/guide, even those with little or no specific experience in the tropics, can show up and immediately have everything required to conduct a first-rate tropical biology field course.



# SERVICES PROVIDED FOR YOUR FIELD-COURSE

In addition to the on-site facilities and services detailed in this packet, LSC and Jatun Sacha can also provide assistance throughout the process of running a study-group, from the earliest stages of recruiting participants to your arrival and departure from Ecuador.

After you have booked your stay at LSC and begin recruiting participants, we send you an "LSC Faculty Users Manual" to help you more efficiently prepare for your course. We also provide a detailed list of items to pack and explanation of "what to expect" for your participants - you merely copy this and distribute it to your group, and everyone is prepared.

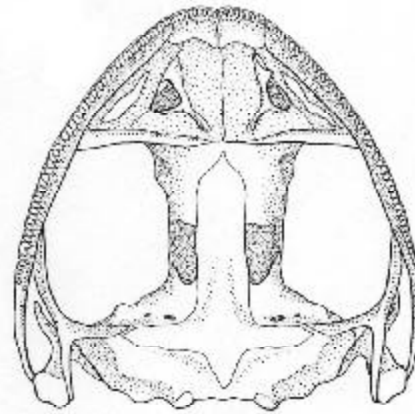
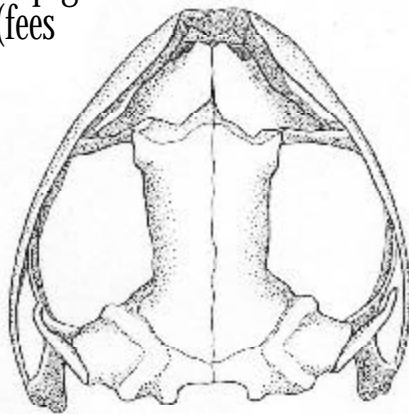
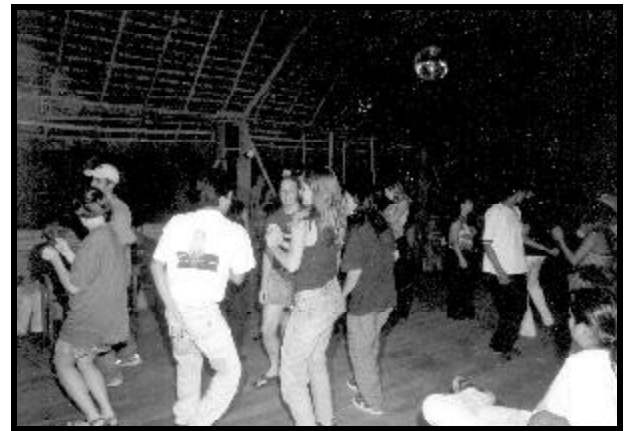
Although we usually do not handle any air-ticketing for study-groups, we can provide assistance with all other aspects of your course from the moment you arrive in Ecuador. Some of these services are listed below:

\* Advance booking of hotel accommodations, first-day tour of Quito, Equatorial Monument, and National Museum, as well as arranging bus transport to Jatun Sacha (no charge for this service; we handle the booking of hotels and tour buses and you pay the providers directly).

\* Services of an experienced Jatun Sacha staff member who will meet you at the airport and accompany your group from Quito to Jatun Sacha, providing orientation for your first full day at the reserve. This service is especially recommended for those group leaders who have not previously visited Jatun Sacha.

\* At LSC, the Jatun Sacha staff can make arrangements for excursions (canoe trips, white-water rafting, visits to indigenous communities, etc.) and can provide the services of one or more park guards who are familiar with all areas of the reserve.

\* Assistance from the Jatun Sacha office in Quito if you wish to visit any of their other three reserves, or take an excursion to the Galapagos or other parts of Ecuador (fees vary).



# COSTS AND POTENTIAL STIPENDS

Because the rates charged by LSC vary depending on the number of participants and the length of stay, and (to a lesser extent) the time of year, we omit any specific listing of prices here (except to proclaim LSC an extremely affordable, great value!). Rates are scaled according to the number of persons in a group and the length of stay; smaller groups for shorter periods pay the highest rates, while larger groups staying longer periods pay the lowest rates (on an overall per person, per day basis). Regardless of length of stay, one faculty/group leader stays free with a minimum of 10 participants, and a second is free with a minimum of 15 participants.

Many institutional field-course and eco-travel programs offered in the U.S. provide for faculty/guide stipends as a standard feature of the program (such as university summer programs). The need for a stipend thus may not apply in your case; we can provide help, however, for those who need a stipend but have no available institutional support.

Based on our experience with previous groups, it is possible for a single group leader to offer a two-week trip to LSC-Jatun Sacha, including airfare and all expenses in Ecuador, for as little as \$2000 per person, with a minimum of 5 - 7 paying participants (and all expenses paid for one leader). With larger groups, it is also possible for group leaders to earn a stipend, ranging from \$500 to \$2500 or more per group.

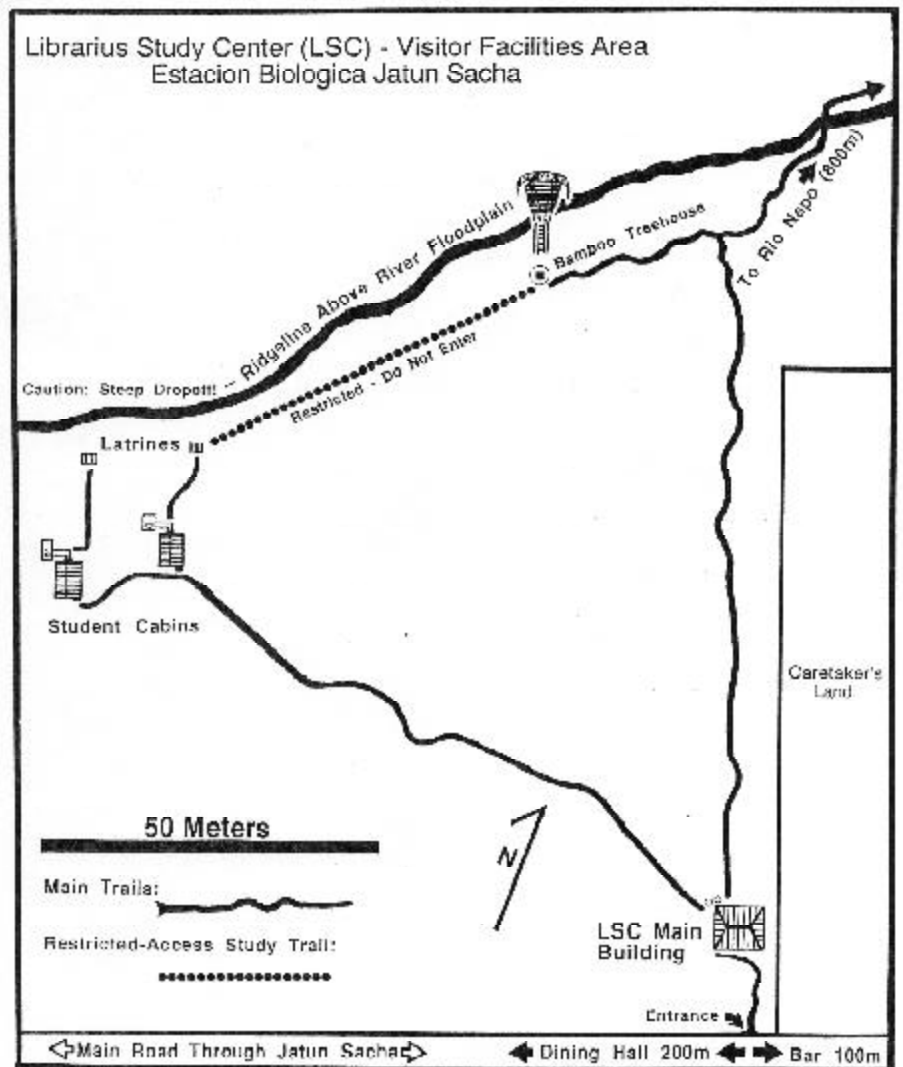
The LSC is most interested in hosting faculty-led course groups from college and university programs, in particular those programs that can be expected to send groups on a repeat basis, although we welcome inquiries from all qualified persons who wish to recruit participants for a study-group (especially museums and zoos). The month of June is already booked by annual university course-groups, but other months are open at this point in time.

# HOW TO GET STARTED

1) After reviewing the material in this packet, contact LSC at least 9-12 months in advance of your trip and discuss the proposed dates and organization of your study-group (see bottom of inside back cover for contact information).

2) Begin recruiting students/participants at least six months in advance of departure, working with LSC as your course develops.

3) Prepare to lead, to teach, to learn, and to be dazzled by the biotic wonders of Amazonia!



# INFRASTRUCTURE AND LEARNING RESOURCES SUMMARY

Visitor facilities at LSC consist of a large central building that serves as both course-facility (first floor) and faculty quarters (second floor; up to 9 persons in 3 rooms), along with two student cabins, each accommodating up to 8 students (located 100 meters distant through the forest from the main building).

While the student cabins were also designed with comfort in mind, the faculty accommodations are yet more comfortable. For course groups with 16 or fewer students, up to 3 faculty/TAs may each have a private room; for larger groups, two double-occupancy rooms are available and a third very large room accommodates up to six persons. All buildings are fitted with mosquito-tight screens on the windows, as well as mosquito nets on each bed; mattresses and bedding are provided.

In addition to the facilities listed below, the LSC features a thatched-roof treehouse perched 14 meters above ground in a tropical cedar tree; this is located a short walk from the main building and is a popular spot for wildlife observation and relaxing.

## RESIDENCE FACILITIES FOR FACULTY & STUDENTS

### FACULTY QUARTERS (2nd floor of main building)

- \* Two single or double occupancy rooms for senior faculty, each equipped with desks, chairs, shelves, overhead and desk lights, and power-strips (standard U.S. 110-volt outlets).
- \* One large room, up to 6 person occupancy (3 bunk beds), for additional faculty, TAs, or students, including hammock, desks, chairs, shelves, overhead lights, and electrical outlets.
- \* Large open porch and balconies overlooking the forest, with two oversize hammocks and comfortable chairs.
- \* Bathroom facilities are located on the first floor at the rear of the building, and include two showers, two flush toilets, and sinks ("cold" water only).

### STUDENT QUARTERS (two cabins, no electricity)

#### For EACH Cabin:

- \* Three rooms - two are double occupancy and one quadruple occupancy (bunk beds).
- \* Each room has tables, chairs, shelves, beds, mosquito nets, and candles.
- \* Large open porch with two oversize hammocks, benches, and comfortable chairs.
- \* Adjoining bathroom facility includes shower, sink, and laundry-washing area.
- \* Two-seater latrine (outhouse); students may also use toilet in main building.





# FIELD COURSE FACILITY

(1st floor of main building)

## CLASSROOM, LIBRARY, LABORATORY, AND VAULT ROOM

### I CLASSROOM

- \* Large classroom with seating for up to 25, with many pertinent reference maps.
- \* Dry-erase board and supplies.
- \* Color TV and VCR for playing video tapes, or viewing re-plays of video exercises direct from a video camera.
- \* Slide projector and screen.
- \* Large refrigerator with freezer.
- \* CD and cassette-tape player.



### II LIBRARY

The LSC library is constantly growing and already includes more than 100 volumes. Students are allowed to check out most books, and in previous courses the library has proved to be an invaluable source of information for students in choosing and conducting independent research projects and in preparing their reports at the end of the course. Use of the library is entirely at the discretion of the group leader, but is highly recommended. A complete list of titles will be provided prior to your departure for Ecuador; current library holdings are summarized below:

#### \* Student readings books:

These are bound, photocopied compilations of pertinent papers and book chapters on a variety of topics concerning rainforest biology and conservation. Each student is issued a readings book upon arrival and the instructor assigns selections for the class to read as part of the course. Typically, assigned readings are discussed by the group and reviewed in student journals.

#### \* Graduate-course research-project books:

These are volumes of research reports by graduate students written while enrolled in tropical biology courses in Costa Rica. More than 100 projects are summarized in four volumes and can be extremely helpful for students looking for directions for their own projects.

#### \* Field guides and species lists of flora and fauna of the area:

LSC is trying to obtain as many "field guides" (or equivalent, with keys) to the biota of the Upper Amazon as possible, but the lack of published summaries for many taxa in the region makes this difficult (contributions welcome). At present, publications are available allowing the identification of most species of woody plants, mammals, birds, amphibians, and reptiles. Species lists of taxa surveyed at the Jatun Sacha reserve are also available, including most vascular plants, birds, amphibians, reptiles, and butterflies.

- \* Books and edited collections on tropical forest ecology, biodiversity studies, & conservation.
- \* A section of volumes on the socio-political aspects of tropical deforestation.
- \* Volumes on the lives and history of indigenous rainforest people - Anthropology and Ethnobotany.
- \* A small selection of books on the history of Amazon exploration.
- \* General textbooks on biology, ecology, and anthropology.
- \* Selection of documentary and historical-drama films on video - "Director's Favorites".
- \* Coming in Summer 2003: Two computers and printers for student use

### III. LABORATORY

Like the library, the equipment available for use is constantly growing; the selection listed below is already sufficient for the needs of most students in conducting short-term research projects and group exercises.

- \* Lab features power strips, steel sink, & ample shelving for specimens & equipment.
- \* Two dissecting microscopes and lights.
- \* Small aquarium with pump & filter, for short-term observation of captive fish.
- \* Two high-quality, lightweight spotlights & rechargeable batteries for night hikes.
- \* Three mist-net panels & lightweight rigging poles, for netting birds or bats.
- \* Three tripods (small to large) for mounting telescopes or cameras.
- \* Wide range of plastic specimen containers & bags.
- \* Cloth collecting bags, various sizes for reptiles, birds, & small mammals.
- \* Selection of nets for collecting aquatic organisms (including large trap-net).
- \* Selection of insect nets.
- \* Measuring tools - including multiple calipers, tape measures, thermometers, & scales.
- \* Supply of cloth work-gloves.



### IV. VAULT ROOM

The aptly named "vault room", on the concrete first floor of LSC, is fitted with a heavy steel door, and iron bars on the single small window. This room is used to store the library and all equipment when the facility is vacant, as well as basic supplies.

When course-groups are in residence, up to three group-leaders are provided keys to this room, and to a large cabinet inside. This cabinet is where the valuables of students and faculty, such as money and passports, can be safely stored while your course is underway; numbered partitions are provided for each room at LSC, with each partitioned space large enough to hold up to two laptop computers and cameras (extra space is also available for faculty).

This system ensures maximum security but allows for the easy and rapid retrieval of stored items when needed. The vault room can also store the combined luggage of an entire group.

