

A MODEL OF EXPERIENTIAL EDUCATION

We have created this field expedition program to be a model of experiential learning. Each day will offer new opportunities to explore the flora and fauna of this unique rainforest environment. Workshop field sessions are limited in size and carefully supervised. While a designated set of rainforest topics is addressed, the program is designed with a flexible format to take advantage of the unplanned opportunities that occur. We embrace these **unexpected sightings or encounters as they are important teachable moments** and often become the most memorable experiences.

We begin by exploring the Amazon's geologic history. Did you know that the Amazon River originally flowed westward from the east coast of Brazil, toward the Pacific Ocean? Our geographic orientation sets that stage for the special experiences that lie ahead.

Experience - LIVING IN THE RAINFOREST

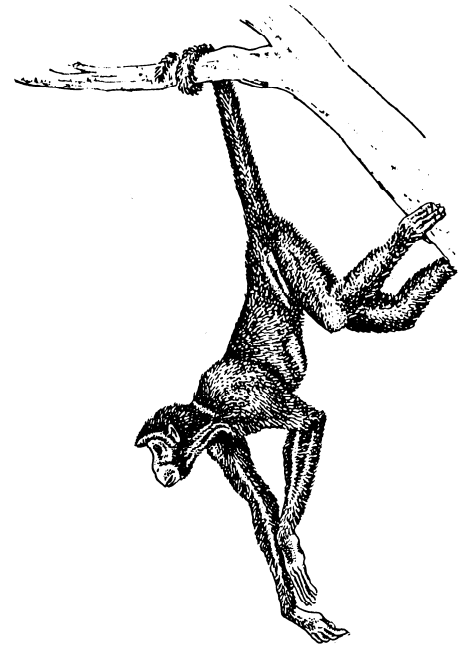
No cars, no roads, no electricity.... Your senses become re-attuned to the beauty of the Earth and its creatures:

- Awake to an early morning chorus of insects, frogs and birds.
- Encounter a surprise sighting of the elegant iridescent blue Morpho Butterfly and watch it transform the rainforest's shadows into a fantasy.
- Curl up in one of the hammocks (located at all facilities) to take an afternoon siesta.
- Listen for the sound of jungle drums that call us to dinner.
- Gaze at the spectacular night sky of the Southern Hemisphere, far from city lights.

Experience - EXPLORATION

Can you smell the rain coming in the rainforest? What changes in light, smell, or color do you notice as you walk from the secondary to the primary rainforest? How does the temperature, humidity, and microclimate change as you scale to the top of the Canopy Walkway? The rainforest is an awe-inspiring place, the perfect place to heighten your sense of wonder and sharpen your observation skills.

- Watch the mist rise from the water during an early morning boat ride to see the many species of resident and migratory birds that live in the Amazon.
- Identify Toucans, Sunbitterns, Tanagers, and King Fishers by their flight patterns and silhouettes.
- Use the information and sketches in a field guide to match the color and markings, and name the birds that you see.
- Study a column of Leaf-Cutting Ants, each one carrying a load many times its own weight, down a scented trail dozens of yards long. Spot their ant mound (home) and consider how these ants live in underground colonies of up to 5 million individuals, maintaining intricate relationships to survive.



- Peak inside the leaf litter to discover a tiny Poison Arrow Frog hiding from its predators.
- Observe a school of freshwater Dolphin as they play in the shallow waters.
- Sharpen your observation skills to see a camouflaged Dead-Leaf Katydid or spot other cunning survival techniques.
- Discover a variety of species of Lizards, Snakes and other Reptiles. Consider where you found them and why they are adapted to live in that location.
- Photograph a Three-Toed Sloth hanging peacefully on a tree branch high overhead.
- Identify the distinctive calls of Tree Frogs, Poison Arrow Frogs, and Marine Toads.
- Observe some of the many jungle partnerships: plants that feed and protect ants; ants that feed and protect plants; micro-organisms that create nutrients for huge buttressed trees; and bats that are nighttime seed dispersers for a range of plants.
- Follow the bright beam of a flashlight to spot insects and rarely seen nocturnal forest creatures on a night hike.
- Savor an unforgettable view of the vast Amazon rainforest on a comfortable and safe platform of the 1/4 mile Canopy Walkway over 100 feet above the forest floor.

Experience — CULTURAL IMMERSION

During our Village Service Project Day, we spend a day working on projects with local people in a Ribereños village. It is evident how families adapt their houses, gardens, and lifestyles to the continual rise and fall of the river, which can vary as much as 30 feet. The time that you spend in the village gives you many cross-cultural appreciations, a sense of what is important to local people, and how closely they rely on the river, rainforest, land, and each other. There are many lessons from this experience that will never be learned in a textbook. As one young participant says:

Many of these local people are living in extreme poverty, yet their joy of life, love for their people, and immense kindness leads me to believe they are far wealthier than the richest of us.

We make a donation to the village on behalf of each group to buy materials and supplies for planting, painting, and construction for the projects that we work on during the day. After lunch, we play soccer and other schoolyard games in a spirited competition. There is ceremony, camaraderie, song and dance, and work and play woven into our Village Project Day. Using even the most elementary Spanish words and phrases will multiply your enjoyment.

You'll meet Yagua people at a Culture & Craft Fair and **learn about the local culture through demonstrations and an array of hands-on experiences** such as casting fishing nets, sampling local foods and beverages made from tropical fruits, thatching palm leaves to create roofing, constructing fiber bags and hammocks, creating a blowgun with native materials (vines, wood, and tree sap), molding coil pots from local clay, and carving paddles from plank buttress wood.

- Test your balance, paddling in a dugout canoe with a hand-carved oar.
- Ready, aim, fire – a blow gun. With a puff of air, you hurl a dart through the air to hit a target while a Yagua coach stands by your side.
- Participate in a healing ritual performed by the shaman at the ReNuPeRu Ethnobotanical Garden and learn about how the sap, fruits, bark, and leaves of medicinal plants in the garden are used to treat infections, parasites, fever, snakebite, fungus, and other jungle illnesses.
- Listen to stories from Pink River Dolphin mythology and learn about local superstitions.
- Sing along as our guides play guitars, drums, and an assortment of homemade instruments.
- Barter with the local Yagua and trade your t-shirts or other items from home for hand-made craft items.

Experience — RESEARCH AND CONSERVATION

Our workshop field sessions are inquiry oriented, demonstrating interconnections among living organisms and environmental conditions. Field study is incredibly exciting in the rainforest and can generate a lifelong interest in science or social studies for those seeking a career path.

We'll use various investigation techniques including: data collecting and recording; observing and describing different rainforest microclimates; identifying relationships between animal and plant species; and using taxonomic keys to identify flora and fauna.

- Use a hand lens to investigate lichens and mosses and look at leaf characteristics.
- Measure leaf toughness with an easily constructed penetrometer.
- Compare colors and sizes of leaves in the upper and lower canopy.
- Bag leaves to check plant transpiration. Will you find greater transpiration at the canopy level or on the forest floor?
- Investigate color preferences of pollinator Orchid Bees by setting out test strips.
- Use a black light to observe the insects that are attracted at night.
- Learn ways of using the rainforest without destroying it and consider the different types of people and their perspectives, both positive and negative, in saving this important environment.

