

AMAZON RAINFOREST WORKSHOPS

Specially Designed for Students & Families

INTRODUCTION

Unique, active, and fun! Through field experiences at four rainforest lodge facilities in the Amazon River basin of Northern Peru, you are engaged in an immersion experience. This travel program is an eye-opening introduction to the environmental and cultural aspects of the Amazon Rainforest and river system. Each workshop is designed by Environmental Expeditions and hosted by EcoTeach to be an experience in a developing country that is safe, comfortable, and accessible. The program offers meaningful experiences with children and local people during the Amazon Library visit, Culture & Craft Fair, Service Project, and other village experiences.

PROGRAM FEATURES

- ❖ Ascend over 115 feet on a 1/4-mile Rainforest Canopy Walkway, one of the few in the world.
- ❖ Visit local communities and contribute to the well being of people who live on the Amazon.
- ❖ Identify ecosystem partnerships in one of the most biologically diverse environments.
- ❖ Engage all of your senses to observe the unique flora and fauna of the Amazon Rainforest.
- ❖ Use hand lenses, binoculars, maps, taxonomic keys for identification, and other simple field equipment with the help of our experienced Naturalist Guides to learn about:

Insect Camouflage & Mimicry • Neotropical Butterflies • Rainforest Canopy Research
Rainforest Conservation • Neotropical Birds & Migration • Reptiles and Amphibians
Rainforest Ecosystem Comparisons • Amazon River System, Geology and Soils
Medicinal Plants • Orchids & Bromeliads

EXPEDITION AT A GLANCE

Day 1 - USA / Lima

Day 2 - Lima / Iquitos / Explorama Lodge

- A.M. Met on Arrival in Lima. Flight to Iquitos.
- Visit the City Market. By Boat to Explorama Lodge.
- P.M. Exploration hike on the Bushmaster Trail.

Day 3 - Explorama Lodge

- A.M. Amazon Culture & Craft Fair.
- P.M. Yagua Trading, Library & Clinic Visits.

Day 4 - Explorama Lodge / ExplorNapó Lodge

- A.M. Visit ReNuPeRu Ethnobotanical Garden.
- P.M. River Explorations and Fishing for Piranha.

Day 5 - ExplorNapó / Amazon Conservatory of Tropical Studies (ACTS)

- Full day at ACTS' Canopy Walkway & in the Rainforest.

Day 6 - ACTS / Ceiba Tops Resort

- Visit Canopy Walkway at dawn. • A.M Rainforest Explorations. • P.M. Transfer by Boat to Ceiba Tops Resort.

Day 7 - Ceiba Tops Resort

- A.M. Village Service Project Day. • Closing Ceremonies.

Day 8 - Ceiba Tops / Lima / U.S.A.

- A.M. Visit Monkey Island & Giant Ceiba Tree. • P.M. By Boat to Iquitos for Flight to Lima. (Group members return home on Day 9. The itinerary will vary with each expedition program.)



WHY CHOOSE TO TRAVEL TO THE PERUVIAN AMAZON?

The Peruvian Amazon provides easy access to primary rainforest areas, has political stability and a friendly culture, and provides unparalleled learning opportunities. You'll experience life in a developing country firsthand and without the disruptive influence of major tourist development. Indigenous people here live a modest life in harmony with their rainforest environment. Also, our participants have the opportunity to see the canopy layer of the rainforest on the Canopy Walkway at the Amazon Conservatory of Tropical Studies. ACTS is a science, education, and tourism facility located on a wilderness area encompassing 250,000 acres of primary rainforest.

WHY ARE THE STUDY AND PRESERVATION OF THE RAINFOREST WORTHY GOALS?

Rainforests cover less than **8 percent of the Earth's land surface**, yet support more than **half of the known plant and animal species**. In a very real sense, they are the lungs of our planet. The Amazon rainforest alone produces about 20 percent of the Earth's oxygen.

One of the greatest needs for preserving the world's rainforests is a more pervasive understanding of these ecosystems and our interdependence with them. While the preservation of rainforests will require immediate and heroic efforts worldwide, our continuing **global health depends upon an educated, caring, and enlightened younger generation**. Those who have visited a rainforest develop an unmatched enthusiasm about their knowledge. The passionate stories about their personal experiences take on special meaning for family and friends at home, and promote a better understanding of the vital role of indigenous cultures and the importance of science in conserving the rainforest.

If there is any place to instill a perspective that recognizes the **integrity and interconnectedness of natural systems – it is the rainforest**. The creatures that have adapted and survived the test of the immense competition of the forest floor are unusual, diverse, and fascinating. Their relationships with other creatures and elements of the environment form an intricate web. The biological value of the rainforest, as well as its spiritual and cultural importance, is too immense to quantify. It is the awareness of this priceless nature that makes **environmental stewardship** a natural outcome.

If there is any place to demonstrate the **interconnections between social studies, science, history, culture, and art – it is the rainforest**. The rainforest experience is inter-disciplinary. It encourages curiosity and inquiry as a basis for science, fosters a geographic perspective, inspires journaling and field sketching, and immerses one in a culture unlike our own. The intensely rich rainforest environment, the simple ways of its indigenous peoples, and their local economic challenges, are easily observable as part of one intact, interrelated system. You'll return home with a grasp of the many perspectives and considerations involved when addressing international environmental problems.

WHAT DOES THE LOSS OF THE RAINFOREST MEAN TO THE WORLD?

It would take the equivalent of many lifetimes to discover all the secrets of the rainforest, if that could ever be done. The indigenous people say that the spirits of the plants give them the power to heal, but this realm of knowledge is yet a mystery. And we have only begun to understand what role that science can play in identifying the benefits of the rainforest to man. Now the problem is that we are running out of time, as the forests are being cut down more rapid than ever.

Our global interdependence with tropical rainforest regions is evident when you consider how rainforest regions impact **our overall health and life-quality through climate stability, plant and animal-derived pharmaceuticals, decorative tropical fish, natural pesticides, and crop alternatives**.

Detailed Itinerary

AMAZON RAINFOREST WORKSHOPS

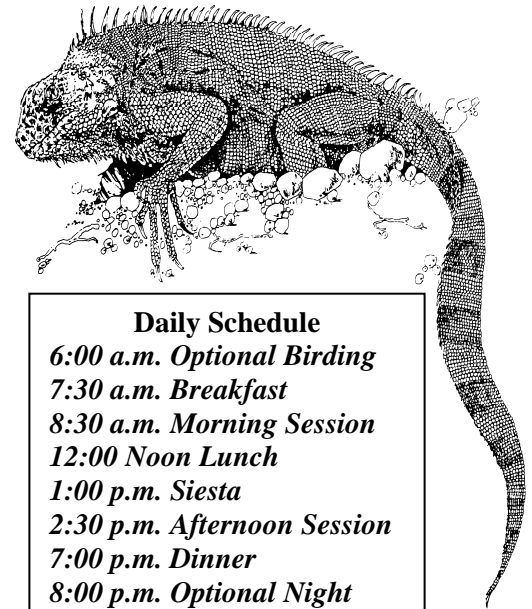
DAY 1 - Your Hometown / Lima, Peru

Group members depart on their domestic and international flights to Lima. You are met on arrival in Lima by our English-speaking travel partners.

DAY 2 - Lima / Iquitos / Overnight Explorama Lodge

At the Lima Airport, we are assisted in boarding our flight to Iquitos, in the upper Amazon basin of northern Peru. When we arrive in Iquitos, Peru, we ‘hit the ground running’ making every minute count in what will undoubtedly be a once-in-a-lifetime experience. At the Iquitos Airport, we will meet our Peruvian naturalist guides who will become your friends and close companions for the rest of the week. We travel by open-air bus through the bustling streets of Iquitos. Located 2,300 miles from the Atlantic Ocean, Iquitos is the most inland port navigable by ocean-going ships on the Amazon River. It is a city whose population has increased from 4,000 to over 400,000 in the last 40 years. We see **the excitement of the marketplace** where everything is sold, from homemade beverages, and live chickens to three-wheeled mototaxi parts. Papayas, plantains, pineapples, chili peppers, hearts of palm, aguaje, cocona, passion fruit, and manioc roots are always in abundance. Vendors display electric eels, fresh and salted fish, dressed turtles, and crated chickens for sale. A fascinating array of chipped barks, dried leaves, hand-bottled potions, aromatic oils, and aphrodisiacs are among the items in the marketplace apothecaries. Children are everywhere, playing as the traffic of daily life goes by. We continue a short distance to **a dock to board our boat for an approximately 1-1/2 hour trip on the Amazon** (roughly 50 miles) to our first rainforest destination, Explorama Lodge. The Amazon River is the Earth’s largest river, which along with its tributaries in the Amazon Basin, holds one-fifth of the planet’s fresh water and covers an area nearly the size of the continental United States.

Traveling east toward the mouth of the Amazon, we see huge logs floating outside the lumber mills. What happens when these 100+ year old Ceiba trees becomes planks of lumber? Who polices the logging in the region? On the river outside of the city, we see thatch-roofed dwellings built on stilts and dugout canoes. It becomes obvious that the river is the life blood of the Ribereños, or “river people.” It is their highway, telephone line, food source, bathtub, and laundry. You’ll immediately feel the spirit of the children who offer their hearty waves from the river banks as we pass by. After reaching Explorama Lodge, we gather for a brief orientation and settle in before **our first walk into the Amazon rainforest, on the Bushmaster Trail**. We hike through an area that has been identified by the Missouri Botanical Garden as having the greatest tree species diversity in the world. Immediately, we see buttressed trees common to the area. Don’t be surprised to spot a troop of Saddleback Tamarin Monkeys feasting on a fig tree laden with ripe fruit. Keep a look out for a tarantula. You will come to know them as secretive, nonaggressive, and lovable creatures. Rainforest creatures are not often easy to find. We are fortunate for the highly trained senses of our Naturalist Guides, who have apprenticed with visiting researchers in order to learn the scientific names of plants and animals. Because our guides have grown up in the rainforest, they are able to share their knowledge of local names and legends and to identify wildlife that we otherwise would never see.



Daily Schedule
6:00 a.m. Optional Birding
7:30 a.m. Breakfast
8:30 a.m. Morning Session
12:00 Noon Lunch
1:00 p.m. Siesta
2:30 p.m. Afternoon Session
7:00 p.m. Dinner
8:00 p.m. Optional Night Walk or Boating

Day 3 - Overnight Explorama Lodge

Today and everyday we have the option of early morning birding – walking or by boat. The diversity of birds is astounding. A list of **nearly 600 bird species** has been compiled for the Iquitos region. As the sun comes up it beckons butterflies to gather at isolated puddles to feed. Resident macaws and parrots, some of the Lodge's favorite photo subjects, await your arrival for breakfast, which is served buffet style in the dining room. During the morning, **the Yagua Culture & Craft Fair** will engage you in roof thatching, sampling local foods, constructing and using a blowgun, pottery making, basket weaving, and much more. After lunch, we'll take part in an interactive activity with local children at Nancy Dunn's library, Centro de Conocimiento Compartido. Not far away at the Yanomono clinic meet Linnea Smith, a U.S. physician who in 1990 abandoned her thriving medical practice in Wisconsin to serve the indigenous people of this region. Don't forget to bring your items to trade this afternoon! Test your bargaining skills at the nearby Yagua village while **bartering for handicrafts**. As night falls we may hear the haunting bird call of the Great Pato. Active only at night, this bird sits erect and motionless during the day typically on a barren tree. Plan to join us in search of night creatures tonight, by boat or on the trail.

Day 4 - Explorama / Overnight ExplorNapó Lodge

After breakfast our group boards a covered, motor boat to travel 1-1/2 hours further downriver on the Amazon and up its largest Peruvian tributary, **the Napo River**. Our guides keep a watchful eye on the river bank for sloth and other wildlife sightings. You'll see the pendant Oropendula nests in the silhouette of a tree near the water's edge. From the Napo River, we take the serpentine path of the **Sucusari River** a short distance to our next jungle accommodations, ExplorNapó Lodge. Before lunch, we take a short hike to the **ReNuPeRu Ethnobotanical Garden** for a session with the Shaman Julio Morales and Guillermo Rodriguez. They are curators and resident experts on the care and use of medicinal plants of the garden. They offer their wisdom through a healing ceremony performed with a number of volunteers who share their particular symptoms – mental or physical. The garden is well maintained and labeled for a walking tour led by our guides to identify plants that are used for important medicines as well as food, spices, building materials, dyes for handicrafts, and insect repellants. Nearly half of all prescriptions dispensed in the U.S. contain substances of natural origins, and over half of these contain a plant-derived compound. More than 1/3 of these plants grow in tropical rainforests. After lunch we board an open boat to go along one of the Napo tributaries for **an afternoon fishing for piranha or catfish, and looking for the elusive Pink River Dolphin**. At low water, sandbars appear and attract egg-laying turtles. Rice is often planted yielding a crop later in the season. These areas of shallow water are prime spots for finding Pink Dolphin. For dinner this evening, we celebrate the biggest catch with a fish fry. Our evening boating trip takes us on the Amazon's meandering tributaries through the forest to find night creatures and sleeping birds. Keep your eyes peeled for an iguana resting on a branch over the water. From our boat on a clear night, the view of the night sky and Southern Constellations will be a reminder of the unfathomable depth of our universe.

Day 5 - ExplorNapó / Overnight ACTS

This morning we take the rainforest trail from ExplorNapó to ACTS for a full day visit to the **Amazon Conservatory of Tropical Studies (ACTS)**. The well-maintained trail passes through primary forest and rolling terrain. As we walk, we pause frequently to fully take in everything around us. Notice the conspicuous Termite nests, large grey mounds seen attached to tree trunks. Listen for the raspy chirp of the Pygmy Marmoset, a shy tiny primate that feeds on tree sap, insects, and ripe fruit. We'll pass numerous palm trees and shrubs, including the Irapay Palm, the most commonly used native roofing material. One of the high points of our day is to experience the **ACTS 1/4-mile Canopy Walkway**, an extensive, multilevel system of aerial platforms and pathways at a height of

over 100 feet. At this canopy level of the rainforest, visitors as well as scientists from around the world are able to study this amazing biome at the level where most tropical forest life exists. Looking out, you will see the tops of trees stretching out toward the horizon. Gaze down from the canopy walkway to see the luxuriant tangle of lianas (vines) and epiphyte-laden trees. **Peer into a bromeliad tank to see a microclimate**, where the overlapping leaves of the plant absorb nutrients from the water collected in its basin, frogs and insects lay their eggs, tadpoles and damselfly nymphs mature, and other aquatic microorganisms live. You'll notice **weather-monitoring stations**, microchips housed in small canisters attached to branches at treetop level, that gather data on temperature and rainfall. This weather data is a baseline to understand the plant growth and flowering as well as other rainforest phenomena. Consider all of the shades of green, the individual patterns, the lines, curves, forms, and textures that illuminate your view. You will no doubt spot a family of Shovel-Tailed Lizards; the male may be bobbing his head up and down in a mating display. You'll be fortunate to be on the walkway when the resident mixed flock comes through, including pairs of birds of different species each with its niche and unique diet of insects or fruits that complements others in the flock. After lunch, enjoy a short hike to see a Leaf-Cutting Ant Colony before returning later in the afternoon to the walkway for a sunset view of the canopy. As darkness falls, we take a brief night hike in search of a patch of **bioluminescent fungus** that lights up the ground underneath you, just as the stars illuminate the sky above.

Day 6 - ACTS / Overnight Ceiba Tops Resort

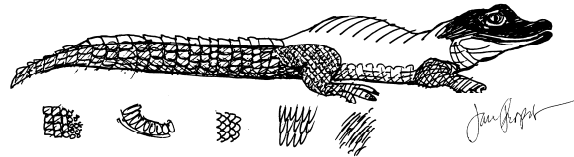
Dawn overlooking the rainforest canopy may be one of the most memorable parts of your rainforest experience. The vastness of the forest is revealed as the fog gradually lifts. Seeing this seemingly endless canopy is truly a contemplative, spiritual experience. By now you'll be accustomed to many different rainforest phenomena. You continue to see ants on every tree and better understand why these ants represent such a huge portion of the biomass of the Earth. Keep a watchful eye for katydids, spiders, walking sticks, and beetles on every hike. There is always something new to see. With literally millions of species of insects in the Amazon rainforest, the variety will astound you. We board covered boats for a return trip up the Amazon River. Enroute we make a stop to visit Caesar, a sugar cane farmer and see how he uses horsepower to crush his cane and collect juice for molasses and rum making. We arrive at Ceiba Tops Resort at the end of the day for a hot-water shower and thrilling ride down their popular water slide into a refreshing swimming pool. Watch the sky for the resident Scarlet and Blue & Gold Macaws to fly overhead chanting their raucous welcome. Miles of trails surround **Ceiba Tops in a privately owned protected reserve** of forest. Ceiba Tops is a good place to scout for the rare tropical Lanternfly with its long wings and shiny head. The Wax-Tailed Hoppers here are equally strange insects and also related to the Cicadas, with long white, waxy plumes and a survival strategy that allows part of its body to be eaten and still escape predators alive. Heliconia plants are interspersed among our cabins. The long banana-like leaves, pendent yellow and red blossoms, and bright colors of their bracts attract hummingbirds such as the Long-Tailed Hermit.

Day 7 - Overnight Ceiba Tops Resort

Today will be one of your busiest days in a local village involved in a ½-day service project with the Ribereños people. The community welcomes us with a ceremony and acknowledgement of our contribution to their village. We'll exchange songs and praises, and begin any number of activities including: 1) painting a school; 2) planting palm or fruit trees or vegetable garden; 3) constructing and painting a fence around school property; 4) palm thatching the roof of a shelter; or 5) creating ecological or community signs. We'll share a lunch of local food and celebrate by playing soccer and volleyball together. Observing how precious few resources sustain each family or classroom in a rural village school is a humbling experience. We leave the community with a huge sense of gratitude and respect for the lives of the people of the Amazon. There will be time yet today to plan for our wrap-up ceremonies and the celebration of an exciting week.

Day 8 - Overnight Ceiba Tops Resort / Lima / USA

After a leisurely breakfast, we take a short walk to the Ceiba Tree. Gazing up at the tree's towering branches will take your breath away. Your visit to **Monkey Island's conservation** project will also no doubt be a highlight. You'll see as many as seven kinds of monkeys in their natural environment. Watch the Wooley Monkeys tangle, playing with each other in the lower branches of a nearby tree. Marvel at the strength of the prehensile tale of the Spider Monkey. Observe the social and foraging behaviors of the Sakis, Tamarins, Marmosets, and Uakari. Ten species of bananas as well as fruit trees are grown on the island to provide food for the monkeys. We take time this morning to **recount what we have seen and ask some reflective questions**. What category of birds on your list have you seen the most? What sounds do you recall? What unique noise did the Capybara make to display his comfort with your affection? Which "bird song" reminds you of the sound of a large drop of water falling into a pool – magnified ten times? Can you diagram a rainforest foodweb of animals that you have seen? What part do herbivores (including seed eaters & nectar lovers), carnivores, and decomposers play in this web? What jungle partnerships do you recall? What have you learned about what we Americans consume? What parallels can you draw between rainforest ecology and your local environment? How can we be more environmentally sensitive at home? How can we help indigenous people and assist them in protecting the rainforests in their backyard? We finish our packing and say good-bye to our rainforest companions. This afternoon we transfer to the Iquitos airport for our flight to Lima in time for our overnight return flight to the U.S.A. Note that you will actually return home on Friday, DAY 9.



AMAZON ACCOMMODATIONS

Field sessions take place at: 1) Explorama Lodge; 2) ExplorNapó Lodge; 3) the Amazon Conservatory of Tropical Studies (ACTS) Lodge; and 4) Ceiba Tops Resort. Nestled in the lush rainforest, the first three lodges are rustic, thatch-roofed, comfortable, clean, and spacious. Each lodge houses private rooms equipped simply with a wash basin, mirror, shelves, and two beds each covered with mosquito netting. The kitchen, dining area, showers, latrines, and sleeping quarters are all connected by picturesque thatch-covered walkways. Meals are served buffet-style, featuring a wide variety of fresh fruits and vegetables, meat or fish, and delicious desserts. Travelers rave about the food, especially the Dorado or Golden Catfish, a thick, locally caught, white fish that grows up to six feet long and can weigh up to 200 lbs. Hiking trails surround each of the lodge facilities.

Ceiba Tops Resort is the only luxury lodge on the Amazon River, having well-appointed rooms with hot water and air conditioning. The beautiful dining area overlooks the swimming pool (complete with jungle water slide, which kids love) and hydro-massage pool. There are walking trails surrounding the facility, with one path leading to an enormous Ceiba (Kapok) tree adjacent to the grounds – a sight not to be missed.

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

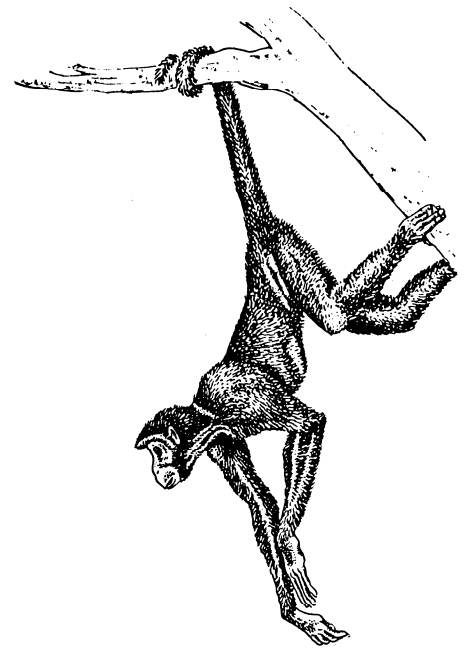
No cars, no roads, no electricity.... Your senses become re-attuned to the beauty of the Earth and its creatures:

- 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.
- Peek 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.

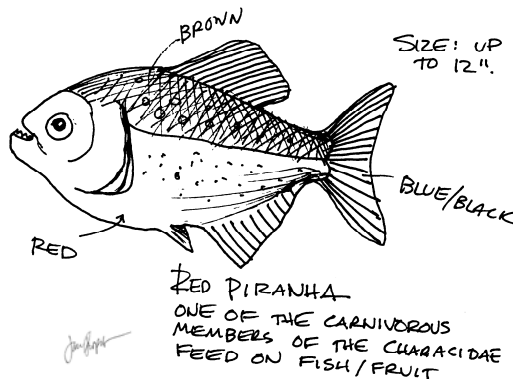
- Test your balance, paddling in a dugout canoe with a hand-carved oar.
- Ready, aim, fire – a blow gun. With a puff of air, you hurl a dart through the air to hit a target while a Yagua coach stands by your side.
- Participate in a healing ritual performed by the shaman at the ReNuPeRu Ethnobotanical 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.



2012 WORKSHOP COSTS

The logistics of your Amazon Workshop are being handled by EcoTeach. Land and air flight costs are separate. The land cost is based on double occupancy and includes: 1) all accommodations, including bedding/linens, and all meals as indicated on the group's itinerary; 2) all ground transfers; 3) all workshop activities and entrance fees; 4) minimum contribution for tips given to guides and other services; 5) departure taxes; and 6) pre-departure checklists, workshop materials, travel logistics, guidance, and support.

In addition to the land cost, here are other items to budget for:

Airfare (appx. \$800-\$1200, plus appx. \$325 for Peruvian flights) – Neither airfare from points in the U.S. to and from Lima nor flights within Peru are included in the land cost for groups booking group airfare with us. Note that if group members are booking independent international flights to and from Lima, we incorporate our best estimate of the Lima/Iquitos round-trip flight into the land cost of the workshop.

Passports (\$85) – Passports need to be valid six months beyond your anticipated date of return to the U.S. and may be purchased through designated local post offices. (Currently no visas are required. Those with non-U.S. passports should contact the Peruvian consulate for details.) You can also consult the website <http://travel.state.gov/passport/index.html> for passport changes and renewal. Allow at least 8 weeks for processing or choose an express service. Renewal of a passport is approximately \$55. If you do not have your passport at the time that you are sending your reservation, leave this blank and notify us as soon as you receive this information.

Personal Items (\$150 or so) – While most all meals are covered, you should plan for purchase of personal items such as beverages available at any of the lodges, gifts, souvenirs, and artifacts (where in most instances can also be charged to a credit card). Note also that you can bring trade items to barter for many local crafts.

Preventive medicine (cost varies) – You should have an up-to-date tetanus immunization. Vaccinations for Yellow Fever & Hepatitis and pills to prevent Malaria should be considered. Though no immunizations are required at this time to enter Peru, it is advisable that you consult your local travel clinic or physician. Bottled water is provided at all lodging locations. Neither Environmental Expeditions nor EcoTeach is not qualified to make medical recommendations. We distribute a letter from the physician in residence in the Amazon and strongly recommend that you contact the Center for Disease Control in Atlanta at 888-232-3228 (for information over the phone) or 888-232-3299 (for fax info). Also, the CDC website www.cdc.gov is excellent.

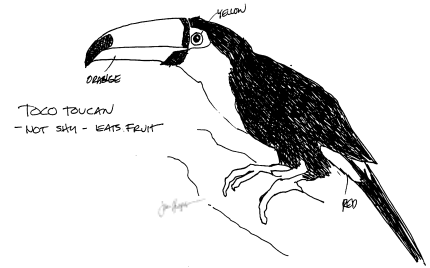
Additional Travel Insurance (optional \$100-\$150 insurance may be purchased for comprehensive or “cancel for any reason” travel insurance) – Basic Post-Departure Travel Insurance is included in the land cost of the workshop. Note that if you choose this specialized insurance coverage, you will need to purchase it at the time of deposit.

Tips for Guides and Staff (optional amount) – Through the land cost of the program, we contribute \$50 on your behalf for tips to guides and staff on the workshop. We suggest that you contribute an equal amount to the tip collection at the end of the trip, however leave the amount up to the discretion of your group leader. Tipping directly is of course always appreciated by local staff for their special deeds or assistance.

Q & A

WHO ARRANGES AIR TRAVEL TO PERU?

EcoTeach works closely with other travel agencies in order to book all group members together and find the most economical airfares on U.S. air carriers.



CAN I COLLECT FREQUENT FLYER MILES?

To collect frequent flyer miles, call the airlines after tickets are issued and give them the flight information and your frequent flyer number. You can also sign up for a frequent flyer number over the phone. This can be done during check-in, but we recommend doing it prior to departure.

WHY CAN'T YOU QUOTE AN EXACT PRICE FOR THE GROUP?

For groups booking group airfare, please be aware that taxes and fees (fuel surcharges, security costs, etc.) imposed by the airlines can change until tickets are issued approximately 2 months prior to your departure date. We need this flexibility to be able to add or subtract with minimum consequences. When tickets are issued, any additional fees will be added to your account and are due with the final payment. Thanks for your understanding of this matter!

WHAT ABOUT FOOD ON INTERNATIONAL FLIGHTS?

U.S. international flights departing gateway cities in the U.S. in the late afternoon serve dinner on flights into Lima. If you have a concern about having a vegetarian inflight meal, please contact the airline after your international tickets are issued. Otherwise, we suggest that you check with your Teacher Leader during your final group meeting as service practices are subject to change.

WHAT IS THE CLIMATE?

The Iquitos, Peru area is located only 3° south of the Equator, so the daily temperatures are about the same throughout the year. The temperatures vary from the high 80s°F during the day to the low 70s°F at night. We are mostly in shade while in the forest, though while on the river in open boats or on the Canopy Walkway, we'll feel more of the warm tropical sun. When rain falls, it typically is not accompanied by blowing winds, but comes straight down, and usually for brief periods in the afternoon or night. The humidity is very high due to the evaporation from the dense jungle foliage. A unique feature of the rainforest surrounding Iquitos is its lack of a specific rainy or dry season. There is a high water period from December through May which is caused by the melting of snow in the mountains as the Andean summer begins and from the rainy season in the upper jungle. The low water period begins in June and ends in November.

WHAT TRAVEL DOCUMENTS ARE REQUIRED?

A U.S. passport valid six months beyond your anticipated date of return to the U.S. is essential. Currently no visas are required. Those with non-U.S. passports should contact the Peruvian Consulate for details.

IS THIS EXPEDITION PHYSICALLY DEMANDING?

Although the expedition is not physically strenuous, with only a moderate amount of hiking, the heat and humidity make it more taxing. We suggest that travelers prepare both mentally and physically to get the most out of their expedition program.

IS THERE ELECTRICITY?

In the middle of the jungle? (Don't count on it!) There are no phones or electric lights there. At the three Amazon lodges, individual rooms and covered walkways are lit by kerosene lights at night. Generators (110v) operate during part of the day and can be used to recharge camera batteries at Explorama Lodge, ExplorNapo, and ACTS. At Ceiba Tops Resort, there is electricity, hot showers, flush toilets, and air conditioning. Electrical outlets will accommodate U.S. plugs.

WHAT WILL OUR BATHROOMS BE LIKE?

The bathrooms at the lodges are in separate buildings adjacent to our accommodations. They are outdoor latrines, cleaned and inspected daily, and private. Showers are also private, housed separately in adjacent buildings. The shower water is gravity fed, using pumped, filtered water from Amazon tributaries.

WHAT LANGUAGE WILL WE NEED TO KNOW TO COMMUNICATE?

We are traveling to a Spanish speaking country, however all of our service providers, guides, and presenters will speak English. Our Peruvian partners work primarily with English speaking clients, so their goal is to make English speakers comfortable. Once you are in Lima, you will always be with someone who speaks both English and Spanish. Also, airline, hotel, lodge, and other transfer services have bilingual employees. We encourage all of our participants to learn some Spanish. Your efforts will be well received by our Peruvian hosts and it doubles the fun of the workshop experience.

SAFETY – OUR #1 PRIORITY!

WHAT ABOUT SAFETY ONSITE?

Personal safety is a priority. Common sense rules are outlined and enforced. Each person has a life jacket when traveling on transfer boats. The Canopy Walkway is carefully maintained and checked daily. The Missouri Botanical Gardens is also involved to regularly examine each of the Walkway's platform trees. The Walkway is constructed to help everyone feel secure. Netting is stretched chest-high on either side of the walkway and there is always something for you to hold on to for balance. Experiencing the walkway is, of course, optional. But most find success in trying, even the most acrophobic.

Our aim is to minimize risk for everyone involved in our programs. Supervision, first aid, equipment & transportation safety, training & instruction, rules, and emergency response are all taken seriously. The Teacher/Student ratio is high. The Guide/Student ratio is high, plus our Naturalist Guides are professionals with many years of field experience. We generally maintain a student/adult ration of 6 to 1. All program activities are supervised by one or more adults. First aid supplies are available during group activities and on boats. Safety rules are established and enforced. Emergency response is supported by advance information collected from each participant and established communications channels.

POLITICALLY, IS IT SAFE?

Yes! Peru is a democracy with a democratically elected president. The area around Iquitos, Peru is peaceful and a traditionally stable part of the country. Iquitos and the rainforests of the upper Amazon are relatively remote and the workshop facilities are secluded in the rainforest. Students, teachers, naturalists, and other travelers have been visiting this area over the last dozen years

without incident. Explorama Tours, our Peruvian travel partner, has been hosting travelers in the upper Amazon basin for over 40 years without disruption of their travel services.

WHAT IS THE PLAN FOR EMERGENCY COMMUNICATIONS?

For each program, we distribute a contact sheet with emergency phone numbers should any parent need to contact a group leader during the workshop expedition. Emergency messages are relayed by radio. Each Amazon lodge facility is in microwave radio communications with the headquarters office of Explorama Tours in Iquitos. Daily boats carry supplies and written messages between lodge facilities. In an emergency, your group leader is able to communicate with parents or contacts in the States by radio and phone via the Iquitos office.

IS THE WATER SAFE TO DRINK?

Plenty of bottled water for brushing your teeth and drinking is available from convenient water dispensers at all the lodge facilities in the Amazon. We recommend that everyone refill their personal water bottles often and drink lots of water.

WHAT ABOUT PREVENTIVE MEDICINE?

Up-to-date tetanus, vaccinations for yellow fever and hepatitis, and pills to prevent Malaria are recommended. Though no immunizations are currently required to enter Peru, it is advisable to consult your local travel clinic or physician. Neither Environmental Expeditions nor EcoTeach is qualified to make medical recommendations. We distribute a letter from the physician in residence in the Amazon and strongly recommend that you contact the Center for Disease Control in Atlanta at 888-232-3228 or 888-232-3299 (for fax info). Also, CDC's website www.cdc.gov is excellent.

WHAT ABOUT MEDICAL CARE WHILE TRAVELING?

Dr. Linnea Smith's medical clinic is central to the facilities in the Amazon and available to travelers with health concerns or need for emergency care. Explorama Tours administrators are also experienced with emergency medical procedures should a traveler need to be transported for more specialized care to the Seventh Day Adventist Hospital, a private facility in Iquitos, giving priority care to Explorama passengers and staff.

WHAT BASELINE INSURANCE IS PROVIDED?

The land cost of your trip includes a post-departure insurance policy with emergency evacuation and emergency medical coverage for each participant. The description of coverage is available on the trip webpage or by request from EcoTeach. Additional comprehensive and "cancel for no reason" insurance policies are available.