

Course: Inquiry, Conservation, and Sustainability in the Amazon

Participants: TABS and NAIS educators interested in global biodiversity, environmental issues, sustainability, inquiry-based and place-based education, stewardship, and community engagement.

Dates: March 6-16, 2019

Facilitated by faculty from:

Asheville School, Asheville, NC
Millbrook School, Millbrook, NY
The Taft School, Watertown, CT



MILLBROOK



Course Rationale

Communities worldwide are asking similar questions-- how do we develop sustainably? How do we interact with place? How do we become connected to our place in the world? How do we use that connection to address issues within our schools? These questions are at the heart of environmental stewardship, place-based education, sustainability, and community-based decision making. The answers depend on educators, administrators, and students becoming responsible stewards, concerned scientists, and informed global citizens. For independent schools to make meaningful change locally and globally, educators need opportunities to participate in transformative models of community action and innovative scientific research and inquiry methods.

The Inquiry, Conservation, and Sustainability (ICS) in the Amazon field course provides these opportunities by taking participants far afield into the world of the indigenous Maijuna, the guardians of Peru's newest conservation area. Participants will be immersed in this successful conservation story by coming together as partners with the Maijuna in stewardship and global citizenship, using scientific research projects, community mapping initiatives, and ecotourism efforts. They will learn the "Maijuna Model" of community-based action and how to apply it to their own schools. Participants will gain experience in using science, place, and community to better answer the essential questions above in their own schools.

The Maijuna are a people underway and in pursuit of answering these questions. They connect us to the urgent nature of today's critical issues surrounding biodiversity, climate change, and social equity and prosperity. Today, there are only 450 Maijuna individuals left living in four villages in a large, forested area between the Napo and Putumayo Rivers. Maijuna ancestral territory is one of the most biologically rich places on Earth and has also been identified as an area of extremely high carbon stocks, making the area a critically important carbon sink in a world increasingly concerned with and impacted by climate change (One Planet, 2017).

Unfortunately, there are currently a wide variety of threats and challenges to Maijuna lands including logging, hunting, fishing, and illegal resource extraction. In addition, Maijuna traditional biological and ecological knowledge is rapidly disappearing, and Maijuna cultural practices and traditions (i.e., ceremonies, songs, stories, etc.) are also rapidly being lost. If this trend is not reversed soon, a significant portion of Maijuna cultural traditions will be irreversibly lost within the near future. Most importantly, however, is the fact that the Maijuna recognize and are cognizant of the degradation of their traditional knowledge, cultural traditions, and biological resources and are currently taking steps to ensure the

survival of their biocultural resources (Gilmore 2005; Gilmore et al. in press). The formation of the Maijuna-Kichwa Regional Conservation Area (MKRCA) was the first step in helping the Maijuna to protect their ancestral lands. The ICS in the Amazon field course furthers this effort through participant support of and engagement in sustainable development and conservation research projects associated with Maijuna-Kichwa Regional Conservation Area (MKRCA) and adjacent buffer zones and protected areas, including the Amazon Conservatory For Tropical Studies (ACTSPeru) canopy walkway field station and reserve.

This partnership builds capacity for the Maijuna to innovatively and continuously address the challenges they face. Similarly, independent school participants gain capacity to return to their own schools with renewed inspiration and skills for classroom learning and school-wide initiatives.

Course Overview

The ICS in the Amazon field course is an 11 day (door to door) cross-curricular professional development workshop designed specifically to meet the needs of independent school educators. The course focuses on stewardship and sustainability, using hands-on investigations, scientific inquiry, research projects, and ecological field studies as key tools to deepen place-based knowledge, resource management, and community capacity. Working with field researchers as well as Maijuna community members, participants will dig deep into the complexities of rainforest ecology, conservation, and sustainable development. As a professional development opportunity, participants will also collaborate with fellow educators to develop classroom and institutional curriculum connections. A small number of select students may attend the program from leadership schools. These students will participate in activities and have an additional concurrent program led by facilitators

Course Objectives

Participants of the ICS course will:

- Partner with the Maijuna people to support their sustainable development projects and gain skills to apply the "Maijuna Model" of community-based conservation to independent schools.
- Develop a sense of place within the Amazon and how to implement place-based and sustainability education in the classroom.
- Experience the Amazon rainforest to develop a global perspective of the richness and interconnectedness of biological and cultural systems, as well as an awareness of personal commitments needed to sustain them.
- Develop an appreciation for the complexities of conservation and sustainability through field workshops coordinated and led by Maijuna community members.
- Deepen understanding about the rainforest system and its global importance through active learning opportunities which apply inquiry-based exploration, citizen science, and hands-on field studies as powerful ways of learning and knowing about the rainforest, one's local environment, and the world.
- Explore how the tools and protocols of inquiry and scientific exploration can be used to achieve community determined goals.
- Use critical reflection exercises to deepen understanding and connection to individual and group experiences.

In the Field

The field component of the ICS in the Amazon field course takes full advantage of the learning resources only the Amazon can provide – amazing biodiversity, complex ecosystem structure, indigenous cultures, and a global learning environment.

Each day offers new learning opportunities and is broken into morning and afternoon sessions. Sessions last three hours and include an introduction to the subject, a field experience in the rainforest or Amazon community, and a guided reflection activity. Field sessions are designed to actively engage participants via guided natural history explorations, inquiry-based learning activities, citizen science research projects, cultural explorations, data collection, and more. Sessions are limited in size, so there is an opportunity for interaction and one-on-one instruction. Daily sessions are facilitated by course instructors, guest faculty and researchers, Maijuna community members, and local naturalist guides.

Tentative Field Itinerary (Subject to Change)

DAY 1: Depart from US and overnight in Lima Peru

Participants depart for Lima, Peru • Overnight at Wyndham Costa del Sol Airport Hotel.

DAY 2: Lima to Iquitos and ExplorNapó Lodge

Transfer to Lima airport • Arrive in Iquitos and transfer to boat dock for trip down the Amazon River and up the Napo River to ExplorNapó Lodge • Orientation to the Peruvian Amazon and its associated conservation and sustainability issues with facilitators and program faculty • Night hike or boat ride.

DAY 3: ExplorNapó Lodge

Pre-breakfast birding and wildlife observation • AM field workshop: Introduction to Place Part 1-- Terrestrial Ecosystems of the Amazon guided hike to ACTSPeru Canopy Walkway • PM field workshop: Introduction to Place Part 2-- Aquatic Ecosystems of the Amazon guided boat explorations of river and black water lake ecosystems • Pre-dinner round table discussion: Defining Sustainability • Introduction to the Maijuna-Kichwa Regional Conservation Area (MKRCA) followed by night hike or night boat ride.

DAY 4: ExplorNapó Lodge

Pre-breakfast birding and wildlife observation • AM field workshop: Meet the Maijuna-- introduction to Maijuna community with Maijuna led visits to school and cultural interpretation center followed by Q&A with community leaders about the development of the MKRCA • PM field workshop: Sustainability in Action-- exploration of several sustainable development projects, including stingless bee honey production and chambira fiber arts with Maijuna community members • Pre-dinner reflection and classroom connections • Evening reflection and debrief • Night hike or night boat ride.

DAY 5: ExplorNapó Lodge

Pre-breakfast birding and wildlife observation • AM field workshop: Sustainable Use of River Resources with guided exploration of Maijuna traditional fishing techniques and their biosand water filtration systems • PM field Workshop: Sustainable Food System-- visit to a traditional Maijuna chacra (farm), cacao and aguaje palm fruit site, and hunter tracking/culpa camera trap study • Pre-dinner round table: Community-based conservation • Evening reflection and debrief • Night hike or night boat ride.

DAY 6: ACTSPeru Canopy Walkway

Pre-breakfast birding and wildlife observation • AM field workshop: Participatory Mapping and Conservation-- collaborative project with Maijuna community members • PM field workshop: Traditional Ecological Knowledge & Conservation-- guided hike with Maijuna community members • Canopy walkway for sunset • Pre-dinner reflection and classroom connections • Night hike.

DAY 7: ACTSPeru Canopy Walkway

Pre-breakfast birding and wildlife observation AM field workshop: Exploring Amazon Biodiversity Part 1-- transect plant sampling and guided hike • PM field workshop: Exploring Amazon Biodiversity Part 2-- hands on arthropod sampling workshop • Roundtable discussion: Biodiversity Conservation – What is the Appropriate Scale? • Pre-dinner reflection and classroom connections • Night hike.

DAY 8: ACTSPeru Canopy Walkway

Pre-breakfast birding and wildlife observation • AM/PM full day of guided and open-inquiry from forest floor to canopy • Pre-dinner roundtable discussion: facilitators share existing classroom projects • Night hike.

DAY 9: ExplorNapo Lodge

Pre-breakfast birding and wildlife observation • AM field workshop: Wildlife watching, piranha fishing, dolphin watching and visit to black water lake. PM field workshop: Curriculum connections, development of action items, and share outs. • Night hike or night boat ride.

DAY 10: Iquitos to Lima and return flights to US

Pre-breakfast birding and wildlife observation • AM: Transfer to Iquitos for return flight to Lima and int'l flights to the U.S. En route visit to the Amazon Medical Project and clinic founded by Dr. Linnea Smith. Note: Participants will return to the U.S. on an overnight flight arriving home on **DAY 11**.

REQUIRED READINGS/MATERIALS/EQUIPMENT

The majority of course readings and assignments will be available online via our virtual classroom. Participants will have access to these materials upon the receipt of their registration form and deposit. A comprehensive optional/suggested reading list will also be provided to participants upon registration.

PROGRAM CONTACT INFORMATION

Christa Dillabaugh
Director, The Morpho Institute
director@morphoinstitute.org
1-913-214-6126
1-716-512-9669 mobile

TRAVEL ARRANGEMENTS

Travel logistics for the ICS in the Amazon is coordinated by **EcoTeach**, Inc. EcoTeach has over 30 years of experience in educational ecotourism and is our trusted travel partner.