Welcome to the Partnership to Conserve Amazon Biodiversity Newsletter, an occasional news update from the U.S. Forest Service Brazil Program Team. For more information about our programs, contact Michelle Zweede, mazweede@fs.fed.us or Suelene Couto, suelene.usfs@gmail.com. Thank you!

The U.S. Agency for International Development (USAID) provides funding for the Partnership for the Conservation of Amazon Biodiversity. The U.S. Forest Service (USFS) is a technical partner, collaborating with the Chico Mendes Institute for the Conservation of Biodiversity (ICMBio), the National Indigenous Foundation (FUNAI), communities, and U.S. and Brazilian universities to support local development and conservation efforts through workshops, seminars, management tools, and on-site technical assistance. United States natural resources professionals build interdisciplinary and intercultural experiences with Brazilian partners to explore new applications of tools and technologies that protect the environment and improve people’s lives in the Amazon.

Our focus this issue --- FORMAR Castanha: To create a sustainable and fair Brazil Nut Value Chain

Recent program highlights

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Upcoming events --- SEPT - OCT - NOV
FORMAR Castanha: To create a sustainable and fair Brazil nut value chain

For Amazonian community leaders seeking sustainability and fair markets for their products, there are no better teachers than their peers, and no better lessons than those already learned by other communities. Recognizing this, the FORMAR Castanha course offered by IEB, ICMBio and USFS on the Brazil nut value chain features association and cooperative leaders as both students and professors. The course takes its name from the Brazilian word meaning both “to create and shape” and “to obtain a degree through academic training,” and the word for “nut.” The 35 students are protected area managers, FUNAI regional staff, indigenous and traditional community producers, association leaders, and cooperative directors. The yearlong course got off to an extremely successful start in early August with a two-week module in Jí-Paraná, Rondônia.

(Pho to: Gaviao / Pacto das Aguas)

This first module traced the path of Brazil nuts from pollination to harvest and storage in the community prior to marketing. After lectures and group exercises led by Ministry of Environment, NGO, and USFS staff on subjects such as protected area policy, value chain structures, and Brazil nut tree ecology, course participants traveled to Rio Branco Indigenous land where the Doá Txatô Indigenous Association has established best production and marketing practices for Brazil nuts. Course participants listened with astonishment and deepening respect as Doá Txatô directors explained how they succeeded in persuading producers in the reserve to adopt best practices for harvesting, drying, and storing nuts, to contribute to the association’s activities and funds. The result is collective sale of the nuts through the association (for some of the best prices received by any communities in the region) rather than individually to itinerant buyers. With support from project partner Pacto das Águas, the association has been able to obtain and rapidly repay investment capital over five years without falling into debt when producers fail to deliver nuts or buyers fail to pay for their contracts.

Back in the classroom, discussions and plans to apply lessons during the upcoming Brazil nut harvest season (December 2017 – April 2018) went into overdrive. Topics included:

- Best practices for managing Brazil nut stands and properly processing nuts so that they are not colonized by molds (led by staff from the NGOs Pacto das Águas and Operação Amazônia Nativa)
• Alternative models for collective sales, with a focus on the iconic Citizens and Solidary Markets model developed by ASPROC(2) to support non-timber forest production in remote regions of the Amazon.
• In the Solidary Markets model, the association uses its own funds to purchase and maintain boats and establishes community stores that sell staples at fair prices. The association receives payment in forest products or in cash, successfully replacing intermediaries who previously provided goods at highly inflated prices and promoted debt peonage.

For the next course module, students return to present activities and research they carry out in their communities. The focus will be “community to market,” with expert and peer instructors as well as a possible visit to the largest Brazil nut plantation in Brazil, established 30 years ago in Itacoatiara just south of Manaus.

(1) International Education Institute of Brazil / Instituto Internacional de Educação do Brasil
(2) Carauari Rural Producers’ Association / Associação dos Produtores Rurais de Carauari

Recent program highlights

Training is essential for trail planning and management in the Amazon

As public use of protected areas in Brazil continues to grow, it is an opportune time to apply best practices in trail planning and management for Amazonian protected areas. In the Tapajos National Forest (FLONA), trails are a focal point of this ICMBio demonstration site that aims to apply best practices in protected area management planning and public use; trails also provide local communities access to sustainable forest resources.

José Risonei da Silva, the chief of FLONA Tapajos, and community members requested a course to improve quality and safety of existing trails, enhance visitor experience, and explore potential for additional trails. The five-day
course, July 24-28, convened 21 traditional and indigenous community members as well as ICMBio employees from FLONA Tapajos, Tapajós-Arapíuns Extractive Reserve, Soure Extractive Reserve, Amazon National Park, and Juruema National Park.

“This course was fundamental because we learned new techniques and concepts, and because we had instructors from our own institution. This shows that the Partnership [between USAID, USFS, and ICMBio] has generated results as we have a staff already trained and training new people, community members and other employees. We want to make our trails sustainable...,” said Silva.

USFS, Colorado State University (CSU), and ICMBio are working together to apply international best practices for aquatic and terrestrial trail planning and management for Amazonian protected areas. On May 4-13, USFS and CSU hosted a technical visit to the Appalachian foothills and Wayne National Forest for Brazilian partners. Key representatives from Brazil also presented at the International Trails Symposium in Dayton, Ohio.

Discussing trail building fundamentals in the FLONA Tapajos (Photo: Lorena Brewster/ USFS)

ICMBio improves methodology for management plans in conservation units

The new methodology, adapted from the U.S. Forest Service and National Park Service, aims at streamlining management plans and other tools to assist ICMBio to implement or improve management strategies in Conservation Units. A workshop led by ICMBio’s Management Planning Division (COMAN) and Social and Environmental Actions Division (DISAT), August 8-9, gathered representatives from the National Rubber Tappers Association, the National Committee for Strengthening Extraction Reserves (Coastal and Marine) and ICMBio managers to discuss an Internal Rules’ document related to this new methodology. Following the presentation, the participating associations and committees planned to reconvene on Sept 11-15 for follow-up discussions.

Management Plan - São Joaquim National Park
Park staff presented the “Management Plan” to ICMBio’s Division for Conservation Unit Creation on August 10. The meeting generated proposals to improve the document, particularly in sections related to public use. Park staff is incorporating the comments to the Description Memorial and Zoning and Rules in order to finalize the draft. Then the Federal Legal Office will review the document for compliance, and once approved, the document will be forwarded to the President’s Office for signature.

Management Plan – Soure Marine Extractive Reserve
On August 14-18, the reserve Chief met with various ICMBio divisions to refine the Management Plan and incorporate participants’ suggestions. The document will then go to the reserve’s review council for approval and will follow the same process as São Joaquim National Park.
Volunteer stewardship and citizen engagement are key to protected area management

“Volunteer stewardship and citizen engagement are universal concepts and needs for all public lands regardless of country or protected area management agency”, commented Ben Lara, Recreation and Lands Staff lead for the Pike and San Isabel National Forests, in reference to the August technical visit by ICMBio to Colorado to build capacity within their National Coordination for Participatory Management and Environmental Education. The two ICMBio coordinators spent August 2-9 in Colorado gathering examples and tools to structure volunteer programs, leverage resources, engage partners, manage information, and communicate with the public.

The Volunteer Technical Visit promoted exchange with national, regional, and local forest management, with Southwest Conservation Corps youth, and decades of experience from public lands volunteers. (Photos left to right: Christiane Bayer, Jayleen Vera / USFS)

The potential impact of this technical assistance is strengthening of volunteer stewardship in Amazon protected areas and the broader Brazilian system with local residents and visitors contributing to research, environmental education, biological conservation, and even firefighting. Beyond conveying technical information to the participants, the visit benefitted USFS staff and local organizations by inspiring new dialogue and learning from each other through the perspective of the visiting Brazilians. This activity followed the ICMBio Volunteer Seminar in Brazil, July 18-20, which brought together over 150 Brazilian participants and featured international speakers, including Ann Baker Easley of Volunteers for Outdoor Colorado, representing the perspective of an NGO partner to federal agency.

Capacity building efforts for the açaí value chain pay off

Project investments in the açaí productive chain over the last two years paid off this May when community entrepreneurs in Cazumbá Iracema Extractive Reserve secured a significant contract with the municipality of Sena Madureira to supply local schools with processed acai pulp. With support from the USFS-ICMBio Sustainable Livelihoods initiative, in 2015 and 2016 a self-organized group of community entrepreneurs in the reserve initiated the açaí production project. A facility with processing equipment was established, and training in açaí processing was leveraged from local extension agencies. A consultant with expertise in community organization for production was embedded in the community and further trained the entrepreneurs in business planning and marketing. Local markets became interested in the product, and recently the initiative secured a contract to provide 5,800 liters of açaí juice for local schools, at a very good price of R$8.50 / liter. A success beyond the actual contract was empowerment of a community organization to represent all residents of the reserve and to add value within a forest-based production chain.

Local community members lead the harvesting, processing and sale of acai from the Cazumbá Iracema Extractive Reserve (Photo: Bruno Ubiali)
Interpretative products are key to helping people discover and connect to Amazon protected areas

Training of trainers and interpretation product development are two Partnership strategies to help people discover and connect to Amazon protected areas. In June, the ICMBio environmental interpretation team tested, adapted, and refined curriculum for Certified Interpretative Guides and Hosts. The National Association for Interpretation (NAI) led the six-day training in coordination with CSU, USFS, and ICMBio at ACADEBio in Sao Paulo state. The course modelled curriculum from established interpretive host training on the development and delivery of thematic messages, how to prepare a guided walk, linking tangibles and intangibles throughout a presentation, and management of groups in guided walks. Each trainee prepared and guided a walk in the Ipanema National Forest about a topic of their choice. At the end of the course, the core ICMBio interpretation team felt empowered to continue implementing interpretation training programs as a conservation strategy for biodiversity conservation throughout their conservation units.

Photos left to right: Certified Interpretative Guide Workshop built institutional capacity to support communication and education efforts (Photo: Colorado State University), Pink river dolphin. (Photo: Suelene Couto / USFS)

Interpretive products can include videos, signs, pamphlets and many other materials to help people learn and connect with a protected area. Two educational videos will soon be available at Anavilhanas National Park, one of the demonstration sites that the Partnership supports to develop best practices in public use and management planning. The videos engage the local community, educate visitors about the park in general, and provide guidance for visitors on appropriate practices for pink river dolphin viewing. The USFS, CSU, and ICMBio team anticipates the pilot products will be completed in September.

Workshop strengthens institutional approach to environmental interpretation planning

The environmental interpretation training carried out within the framework of Partnership for Conservation of Amazon Biodiversity has led ICMBio to form an expanded team of environmental interpreters and link it to the institution’s Public Use and Business division. Beyond the application and adaptation of tools to the Brazilian context, the team is focusing on strengthening and institutionalizing environmental interpretation to benefit both remote Amazon conservation units and heavily visited central parks. The goals and activities of the team include defining concepts, guidelines, monitoring, procedures for drafting interpretative plans and trainings, preparation of learning materials, and work protocols. Six representatives of the expanded team held the Environmental Interpretation Planning Workshop, June 19 to 23, in Chapada dos Veadeiros National Park. The protocols were then applied to the park specific interpretative planning session that followed in August. This initiative strengthens the process of institutional capacity for environmental interpretation as a tool for managing federal conservation units, and the resulting connection to visitor education and conservation and value of protected areas.
Assessment of pirarucu management in Amazonas to benefit the region

Understanding the extent and condition of lakes, the volume of fish produced, the technical capacity of communities for management, and the price and market conditions encountered by the producers are the focus of an assessment launched by Operação Amazônia Nativa and Conservation Strategy Fund in May in Amazonas state. The organizations contracted a pirarucu management expert, Dr. João Vitor Campos Silva, and held key coordination meetings with partner Mamirauá Sustainable Development Institute (IDSM). The assessment will provide the first statewide picture of pirarucu management in Amazonas, which will inform project strategy over the next two years and providing parameters for positive engagement with the commercial sector. (Photo: Adriano Gambarini / OPAN)

RESEX Verde Para Sempre communities build capacity and networks for timber management

Communities continue work to improve the financial output and sustainability of legal, small-scale community-based timber management in the Verde para Sempre Extractive Reserve. Heavy rains in late 2016 and early 2017 delayed timber harvesting for many of the communities. The delay gave Sustainable Livelihoods partners led by the International Education Institute of Brazil (IEB) more time to prepare the communities for the late 2017 harvest, helping them address and improve fiscal and labor issues through better planning. The Brazilian Forest Service will support the harvest. In March, IEB assessed the quality of social organization for productive activities of six community associations and cooperatives in the reserve. The IEB team found that five out of six organizations could benefit from improved understanding of accounting and contracting logistics of timber management. IEB plans to follow-up with training later this year. IEB also provided support for the communities in their development of internal norms for governance and benefit sharing of timber revenues.
Fire management – action and training

An Alto Xingu indigenous firefighting team is preventing and combating forest fires through a partnership between USFS and NGO Aliança da Terra bringing supplies, training, and volunteer firefighter coordination to the Xingu region.

Matu is one of 12 Kamayura firefighters that is acting with Aliança da Terra to complete small-scale burns forming protective firebreaks and meeting subsistence needs under controlled conditions, as well as to construct fire lines, and provide the first response when wildfire threatens surrounding lands. (Photos: Lourivan Pereira / Aliança da Terra)

On July 3-8, two fire personnel from USFS and Mexico joined the ICMBio Firefighter Instructor Training at Chapada dos Veadeiros National Park to observe, participate, and contribute to ongoing efforts to train 35 participants to manage and lead fire actions in protected areas and indigenous lands across Brazil. The visiting team conducted a sand table exercise to practice tactical decision-making and planning.

Notably, the team re-connected with participants from previous USFS trainings, including the 2014 Fire Leadership training in Tocantins and the 2015 Prescribed Fire Technical Visit, and participants shared how those trainings catalyzed them to improve as crew leaders and to initiate prescribed fire programs for fuels management within several parks. Prescribed fire for fuels management thins brush and grass, particularly the dry dead vegetation, and the result is a more resilient landscape, with mosaic species distribution and also more favorable conditions to control wildfires that do occur. Fire manager, Taide Acosta Rodriguez, from Mexico leads a sand table exercise. (Photos: Christian Berlinck /ICMBio)

Visitor monitoring tools deliver important results in protected area management

A workshop on Public Use planning, June 26 – July 1, integrated international and Brazilian tools and expertise to define and expand opportunities to meet increasing park visitation demands in the protected area system.

Presentations focused on understanding how to measure and assess recreation opportunities, using the USFS Recreation Opportunity Spectrum (ROVAP in Portuguese). The workshop also explored how to estimate the demand for visitation, using an ICMBio assessment tool. The ROVAP tool has been used in many countries to bolster public use and tourism initiatives in various protected areas. Last year CSU facilitators and ICMBio staff developed a draft technical manual for managers and planners to apply ROVAP in Brazil. Soure Marine Extractive Reserve, Iguacu National Park, and Sao Joaquim National Park are testing the public use planning tools over time.

Iguacu National Park (Photo: Alex Weinberg / USFS)
Visitor monitoring provides important data on the number, profile, and perceptions of visitors to a protected area. For the past three years, West Virginia University (WVU) has worked with ICMBio at the Tapajós and Anavilhanas demonstration sites to develop a visitor-monitoring program. This involved field training over 10 locals on the use of technologies for data collection in tourism and leisure studies. From April through May, 41 surveys were collected with 48 days reported on at the Alter do Chão Visitor Center (CAT). The center itself was a joint effort with USAID and local partners, remodeled in 2015 to draw tourists in Alter do Chão to visit the Tapajós National Forest. At Anavilhanas National Park, data collection has reached 7,309 surveys in two years. To deepen the impact of the fieldwork and applicability for ICMBio, WVU and USFS experts facilitated a workshop on Visitor Use Monitoring from August 21-15 at ACADEBIO in São Paulo state and are also planning a technical visit to the US in October. Involvement from West Virginia University is promoting academic writing on visitor use monitoring and applications to protected area management in Brazil, such as

Lidiane Castro Gregory's master thesis (WVU June 2017): Recreation in the Brazilian Amazon - Understanding Visitor Profile and Perceptions of Crowding:

https://gallery.mailchimp.com/91e312c80549ac310821ad2e2/files/2106dc17-77a3-47f4-b654-b5071e4be104/Recreation_in_the_Brazilian_Amazon_Thesis_Lidiane_Castro_Gregory.pdf

**Brazilian land managers attain intensive, professional training in protected area management**

Brazilian protected area managers recently joined counterparts from around the world to attend various intensive, professional courses. Participants had to be selected within their institution and then undergo several months of program application and preparation for these highly sought after experiential trainings which included:

**Protected Area Management Course**, June 26-July 16, organized by Colorado State University (CSU) and USFS. This was the 27th annual course to train senior level planners and managers of nationally significant protected areas worldwide and examine strategies to conserve the world’s most special places.

**International Seminar on Protected Area Management**, June 27-July2, organized by the University of Montana and USFS. 25 participants from around the world learned and shared best practices during visits to four National Forests, one National Park, and surrounding communities.

**International Field Course on Protected Area Management**, July 5- August 5, organized by CSU and USFS. This course is all in Spanish. Participants interact extensively with various local, state, and federal agencies, collaborating private conservation organizations and tourism businesses, and citizen groups to gain hands-on experience in managing complex conservation challenges balancing use and conservation of natural areas.
UPCOMING EVENTS --- SEPT - OCT - NOV

**August 28 – September 2.** Technical visit by ICMBio and FUNAI to DC and Montana to learn about US public lands creation to management of natural resources, use of forest products, partnerships, sustainable tourism and tribal relations

**September 1.** Completion of the viability study for the RECABAAM network of community-based Brazil nut processing plants, Amazonas

**September 7-23.** Planning and Managing Tourism in Protected Areas Seminar, organized by CSU and USFS

**September 30.** Completion of construction of fish pre-processing barges in the Paumari Indigenous Lands and Medio Purus Extractive Reserve, Amazonas.

**September.** Timber harvest in production units of the Verde para Sempre Extractive Reserve, Pará.

**September.** Planning and preparation for the 2017 pirarucu fish harvest in Auatí-Paraná Extractive Reserve, Amazonas.

**October 9-20.** Trails Together technical visit, California

**October 23-27.** Management Planning Facilitation workshop, Goias

**October.** Visitor Monitoring technical visit

**SAVE THE DATE: DEC 4-8. Partners Meeting, Brasilia:** USFS as a technical implementing partner under the USAID Partnership for the Conservation of Amazon Biodiversity will host an annual meeting with partners to share successes, expand best practices, and exchange lessons learned.