March 2026

2025 Update: ICFC Field Training Fellowship

Project Field director: Alejandro Lopera-Toro

We wanted to thank you again for your support for this project and give you this update on last year.

Overall benefits

Through hands-on involvement in projects such as Andean bear tracking, seed germination trials, entomological sampling, and nursery management, fellows deepened their understanding of species-habitat interactions, ecological restoration, and the importance of seed viability and plant propagation in reforestation efforts. They also contributed to long-term monitoring of fauna and flora, the collection and analysis of ecological data, and community outreach in environmental education. These experiences not only advanced their scientific and technical skills but also reinforced the role of ecological restoration and biodiversity research in supporting ecosystem resilience and regional climate adaptation.

2025 summary of training components:

- **Andean Bear Monitoring** elucidated bear activity, including the location of a bear den and latrine. Fecal samples were collected for various analyses, with fellows gaining skills in identifying signs of animal presence.
- **Fauna Monitoring**: Continued monitoring of "Osa Fiona" (Fiona the Bear) offered valuable experience in long-term species tracking and wildlife data collection.
- **Entomological Sampling**: Fellows learned standard field sampling protocols with installation and collection of data from mammal traps and various entomological traps (Malaise, Pitfall, Pan traps) in designated zones (Trocha Oso, Canopy Zone). They gained familiarity with targeted insect collection methods for ants and baited pitfall traps for coprophagous (dung) beetles, strengthening their understanding of invertebrate ecology and bioindicator taxa.
- **Botanical Collection**: Collection of *Prunus pleiantha, Hesperomeles*, and *Cecropia* fruits. The discovery of *Oreocallis grandiflora* was significant for the area.
- **Seed Germination Protocols**: Fellows gained technical skills in all aspects of seed germination protocols for the nursery.
- **Seed Analysis**: Processing of fecal samples and fruits for viability, germination, tetrazolium tests, and maturation of immature seeds. Germination data analysis (thermal, mechanical, and biological).
- **Nursery Management**: Improvements to the nursery, including gravel replacement, construction of light protectors, and regular watering. Preparation of substrate for mass production of seedlings.
- **Herbarium Maintenance**: Fellows got exposed to plant specimen curation, the review and maintenance of herbarium samples, including fungal contamination removal and sample curation.
- **Data Collection & Analysis**: Collection of *Prunus pleiantha* for accessions, slides, DNA, fruit/flower conservation, and germination tests.

- **Training & Education**: Fellows took part in workshops on wildlife and botany monitoring, application usage (Epicollet5, FieldMap, QuickCapture), capture and baiting protocols, and first aid, which further prepared them for independent work in remote environments. Fellows also contributed to environmental education, helping prepare outreach materials and enhancing their communication skills.

Looking forward

Biome is pausing the Field Training Fellowship session in the second half of 2026. We are very pleased with the long-term contribution this program is making to tropical conservation but are using the second half of 2026 to restructure the program

Thank you for your support for this project! Please let us know if you have questions or would like to discuss this project or receive further information.

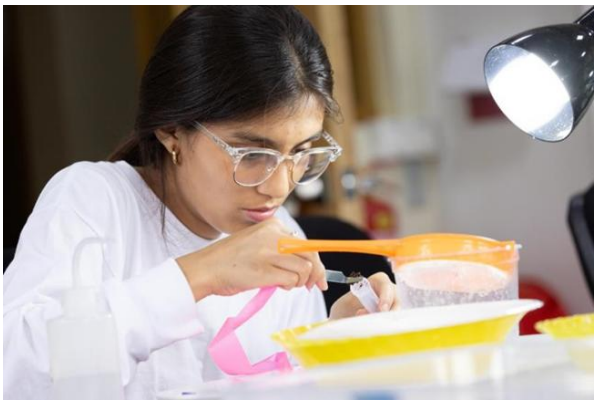
Biome's Project Lead for this project: Andre Boraks, PhD, Director of Programs & Data, andre@biomeconservation.org

Left: Fellows in the 2025 first semester

Below left: Fellows at the Ukuku Raymi event

Below right: ICFC Fellow Eduardo Vargas explains to children the morphological characteristics of ants and dung beetles.

Pictures from the lab



Pictures from the field