

Angela Fuller



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(left) Workshop participants Jefferson Morales (Yunguilla) and Antonio Murcia (Mindó) set-up a camera station north of Yunguilla, Ecuador, during a training field day. (right) Workshop participants including Dario Reina (Pululahua Geobotanical Reserve), Dana Morin (Cornell University), Mauricio Morales (Bellavista), break for lunch while hiking to a camera station north of Yunguilla, Ecuador.

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Workshop participants pose at an overlook view of the northern half of the study area. Front row from left to right: Dario Reina (Pululahua Geobotanical Reserve), Raul Torres (Yunguilla), Mauricio Morales (Bellavista), Rene Lima (Pahuma). Back row from left to right: Angela Fuller (USGS, Cornell University), Patricio Ono (Pululahua Geobotanical Reserve), Javier Lima (Pahuma), Dana Morin (Cornell University), Antonio Murcia (Mindó), Edison Tapia (Santa Lucia), Santiago Molina (CONDESAN), Diana Sulca (Cambugan), and Erich Gomez (Tulipe).

In total, we trained 16 participants from Yunguilla, Pahuma, Mindó, Bellavista, Cambugan, Santa Lucia, and also 6 biologists from Pululahua Geobotanical Reserve, the Office of the Secretary of the Environment, District of Quito, CONDESAN, and the Ministry of the Environment. Among local participants were 4 students from Yunguilla, as well as a father son team and 3 ecotourism guides from the region, demonstrating the education and engagement of local communities and partners. Our engagement with these partners has continued as the trained technicians have conducted the study and brought the educational information back to their own communities, empowering them to speak out for conservation of Andean bears and preservation of their native forests, currently threatened by land use change including slash-and-burn agriculture and mining interests. By engaging with the local communities we have already succeeded in promoting the project and the forest diversity as a boon to the residents, adding social and economic value to the Andean bear in a region where habitat loss and human-wildlife conflict is a primary threat.

An IBA Research & Conservation Grant was awarded to the project in 2016, including contributions from the Homer's Bear Conservation Fund and an anonymous donor. Funds from that grant were used to pay daily salaries for trained field technicians as they conducted the camera-trap study, installing and checking cameras, and collecting data. The first 3-month season, coordinated by Santiago Molina and Manuel Peralvo (CONDESAN), and Dana Morin and Angela Fuller (New York Cooperative Fish and Wildlife Research Unit, Cornell University, and USGS), concluded in November 2016 resulting in over 100,000 photos from 101 cameras. In addition to Andean bears we have documented an extensive suite of mammals including puma, ocelot, margay, oncilla, northern pudu, red brocket deer, white-tailed deer, tayra, striped hog-nosed skunk, long-tailed weasel, South American coati, culpeo fox, collared peccary, common opossum, red-tailed squirrel, Central American agouti, paca, giant anteater, and nine-banded armadillo. The enormous amount of mammal diversity at the camera stations is due partly to the expansive extent of the study area and the wide elevational gradient, only possible due to the local community site approach.

