



GALAPAGOS FIELD PROGRAM



When the Galapagos instituted island-wide curfews in response to the COVID-19 pandemic, EPI Galapagos was deeply affected. We were forced to cancel all courses and outreach, affecting hundreds of participants. Prior to the pandemic, 38 youth and teachers—just 16% of the participants served last year—from the Galapagos Islands, mainland Ecuador, and the U.S. engaged in inquiry-based field science and conservation service through EPI's immersive Galapagos Island Ecology courses.

FIELD PROGRAM AT-A-GLANCE

38 YOUTH AND TEACHER PARTICIPANTS

266 FIELD DAYS

17% IMPROVEMENT IN ENVIRONMENTAL LITERACY



CONSERVATION RESEARCH



Galapagos Tortoise Monitoring

In a unique partnership with the Galapagos National Park and Dr. Washington Tapia, EPI students helped scientists understand ecology and migration patterns of giant tortoises, as well as survival and mortality rates. Students assisted park rangers in locating tortoises, collecting biometric data, and tagging and branding the shells of individual tortoises for population census tracking. This year, EPI students were able to work with tortoise populations from four different locations on Santa Cruz Island.

Seed Identification

The giant Galapagos tortoise plays a unique role in the ecosystem of the islands—that of seed disperser. To better understand the role tortoises play in distributing seeds of both native and invasive plant species as they move about the island, students assisted Dr. Stephen Blake in collecting tortoise dung and identifying the types of seeds found in samples. Despite a truncated field season due to the pandemic, EPI participants identified and cataloged more than 1,000 seeds.



CONSERVATION SERVICE



Invasive species are the number one threat to the unique ecosystems of the Galapagos Islands, with more than 800 invasive plant species now identified. In the Galapagos National Park, blackberry, guava, and cascarilla threaten food sources and habitat for native and endemic species, including the endangered giant tortoise.

Blackberry thickets in particular can pose multiple problems—including blocking ancient migration routes for tortoises and preventing reseeding by native shrubs and trees. In 2020, EPI Galapagos students helped remove more than 2,300 invasive plants in fragile areas on Santa Cruz Island—restoring habitat for endangered species, and empowering students to take an active role in Galapagos conservation efforts.

"EPI has made me more of a conservationist, more able to see the small and beautiful things that exist in our ecosystem, and how to take care of them."

-Alejandro, 2020 Galapagos Alumni Survey

CONSERVATION IMPACTS

2,324 INVASIVE PLANTS REMOVED

16 GIANT TORTOISES MONITORED OR RECAPTURED

47% INCREASE IN STUDENT KNOWLEDGE OF CONSERVATION ACTION STRATEGIES

ALUMNI & OUTREACH

EPI Galapagos' alumni and outreach programs were also profoundly affected by the pandemic. We were forced to cancel annual community awareness and conservation service events as well as alumni research projects, workshops, and field trips— affecting hundreds of participants. However, alumni participating in the EPI Galapagos Mola Mola Eco Club led several sea turtle conservation workshops prior to the pandemic, continued to educate drivers to prevent wildlife collisions, and conducted microplastic surveys on public beaches. During the most restrictive phases of the pandemic, Mola Mola Eco Club members continued to meet virtually to plan for future community-based projects.

ALUMNI ACTIVITIES AT-A-GLANCE

147 | EPI ALUMNI AND COMMUNITY PARTICIPANTS

12 | MICROPLASTIC SURVEYS

29 | GREEN SEA TURTLE NESTS PROTECTED

ACTIVITIES

Alumni and Green Sea Turtle Conservation

For the 7th year, EPI Mola Mola Eco Club members took action to protect the endangered green sea turtle nests at Tortuga Bay and Puerto Villamil. EPI alumni and interns collaborated with the Galapagos National Park and Intercultural Outreach Initiative to engage community members to take part in green sea turtle conservation efforts. Collaborating with the Galapagos National Park and the Intercultural Outreach Initiative, alumni engaged a total of 81 community members to help protect 29 green sea turtle nests.

In addition, two sea turtle courses were held for local EPI alumni and fellow students at Las Salinas beach on Baltra Island. EPI Galapagos alumni received training from EPI staff, as well as scientists from the Galapagos National Park's Department of Applied Marine Research on the biology and conservation of sea turtles internationally and locally, identification of their threats in key habitats, importance of nesting sites, and nest monitoring techniques. Youth were able to practice collecting biometric data to prepare them for leading citizen science activities at Tortuga Bay.



EPI GALAPAGOS ALUMNI AND ECO CLUB MEMBERS WORK TO SPREAD AWARENESS OF INTERNATIONAL FISHING BOATS NEAR THE MARINE RESERVE

NOTABLE

International Youth Leadership Council

Three of our most active Mola Mola Eco Club members joined the International Youth Leadership Council, an initiative of the nonprofit organization, EarthEcho International, to bring together young people from across the globe interested in conservation issues. The Council held the 5th Annual Youth Leadership Summit virtually from August 6th-8th, with 400 young people from 32 countries and regions, including our three EPI alumni from Puerto Ayora (Galapagos). One of their goals is to create a wave of collective youth action to protect 30% of the world's oceans by 2030.



Protecting Galapagos Birds

With the Charles Darwin Foundation support, EPI Mola Mola Eco Club members once again carried out a campaign to increase awareness among drivers about the problem of bird collisions. Alumni wore costumes at Puerto Ayora traffic lights to create awareness among local drivers about this challenge. Alumni actively reached out to 200 drivers and provided them alternatives to reduce bird collisions.

Investigating Beach Pollution

For the 3rd year, EPI Galapagos alumni worked with Litter Scientists, a group of researchers from Chile studying pollution in Latin America. Twenty EPI alumni participated in research studies at Tortuga Bay and Los Millonarios Beach, helping to determine that the source of the litter on the beaches was local, rather than brought in by the ocean. This finding indicates that the solution to the pollution will require local action—exactly the kind of community outreach and leadership at which EPI Galapagos alumni excel.



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PARTNERS

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