

# IMPACTS

## EPI GLOBAL FIELD PROGRAMS



The effects of the pandemic on Ecology Project International in 2020 were profound. We faced border, beach, and school closings internationally, and had to temporarily shutter our Belize field site. Yet despite the pandemic, we maintained critical protection for nesting leatherback sea turtles in Costa Rica, safely provided high school credit recovery courses for Indigenous youth in Montana, and developed new urban ecology and water resource programs in Mexico.

During this crisis, EPI's staff and board nucleated, adapted, and kept moving—focused on our mission to inspire youth with nature and empower them with science, fostering tomorrow's leaders.

### FIELD WORK AT-A-GLANCE

23,409	HATCHLINGS RELEASED IN COSTA RICA & MEXICO
28	RESEARCH ASSISTANTS & INTERNS
375	LOCAL STUDENTS



#### EPI'S PACUARE RESERVE

##### Sea Turtle Nest Protection in Costa Rica During COVID

EPI's Pacuare Reserve has the highest density of nesting leatherback sea turtles in Costa Rica. Prior to protection, more than 90% of sea turtle eggs were lost to illegal harvest and other threats. Today, it is less than 4%. When the pandemic forced Costa Rica to shut its borders, local and international research assistants chose to stay and isolate at Pacuare Reserve—continuing to provide protection for nesting sea turtles, eggs, and hatchlings. These dedicated research assistants often worked more than 80 hours per week, walked up to eight miles each night, and saved more than 54,601 sea turtle eggs!



#### EPI GALAPAGOS

##### Restoring Habitat in the Galapagos

Invasive species are the number one threat to the unique ecosystems of the Galapagos Islands, with more than 800 invasive plant species now identified. EPI Galapagos students worked with Galapagos National Park to restore key habitat for endemic species by removing more than 2,300 invasive plants like cascarilla, blackberry, and guava. Through this hands-on conservation service, students restored migration corridors and protected native food sources for the endangered giant tortoise—and became empowered to take an active role in Galapagos conservation efforts.



#### EPI YELLOWSTONE

##### Helping Indigenous Youth Graduate

For the 10<sup>th</sup> year, EPI Yellowstone partnered with the Wolf Point School District on the Fort Peck Reservation to provide field science courses for high school students needing additional credits to graduate.

In July, with heavily adapted programming to ensure student safety, six students from the Reservation attended our five-day immersive program in Yellowstone National Park. Youth spent a day with the park's bison team, learning about wildlife management issues, and the links between the park's bison and their own tribal herds, and helping them recover the credits needed to graduate high school.



#### EPI MEXICO

##### Protecting Coral Reefs in Baja

For four years, EPI Mexico students have conducted snorkel surveys in the Gulf of California to monitor the diversity of endangered and economically important invertebrates. This year, students also surveyed for outbreaks of the crown-of-thorns sea star, *Acanthaster planci*, which preys upon coral, near the protected island of Espiritu Santo. In Australia's Great Barrier Reef, these sea stars were responsible for a 25% loss of coral cover between 1985-2012, and their presence in Baja is of concern. EPI Mexico students' data will help inform scientists of the threats from these giant corallivores, as well as identifying possible target areas for removal efforts.



AVERAGE GROWTH IN ENVIRONMENTAL LITERACY

16%



# ALUMNI & OUTREACH

The COVID-19 pandemic also deeply impacted our alumni and outreach programs. Last summer, we were forced to cancel dozens of alumni enrichment activities and community events globally. However, there were highlights—EPI Yellowstone and MPG Ranch safely provided the Bitterroot Wildlife Internships, giving local EPI alumni mentored, extended independent research opportunities. EPI Mexico alumni were trained as leaders in and hosted endangered green sea turtle conservation workshops. And EPI Galapagos and EPI Mexico's alumni continued connecting through virtual eco club meetings, strategizing their next conservation campaigns—some of which are now underway.



EPI MEXICO ALUMNI LED FOUR GREEN SEA TURTLE CONSERVATION WORKSHOPS WITH GRUPO TORTUGUERO

## OUTREACH AT-A-GLANCE



121 ALUMNI & OUTREACH EVENTS  
6,021 ALUMNI & COMMUNITY PARTICIPANTS

## NOTABLE ALUMNI ACTIVITIES



**EPI Mexico**  
**Water Workshop Internships**  
Baja California Sur is the driest state in Mexico, with less than ten inches of rain per year. In La Paz, water shortages exist due to a rapidly increasing population and aquifer overexploitation. Deforestation in the Sierra Mountains has also reduced the aquifer's ability to recharge. Through EPI Mexico's internship program, seven alumni studying Water Science at Universidad Autónoma de Baja California Sur were trained in EPI's educational

model. These alumni helped facilitate ten water workshops with high schools and public education events in La Paz, reaching more than 1,100 youth and community members.

### **EPI Galapagos** **Investigating Beach Pollution**

For the 3<sup>rd</sup> year, EPI Galapagos alumni worked with Litter Scientists, a group of researchers from Chile studying pollution in Latin America. Twenty 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.

## COVID-19

Like so many in the global community, EPI faced uncharted waters upon the outbreak of COVID-19. Due to the virus, EPI was forced to cancel most of our more than 120 planned field science courses for 2020. We reduced staff by 60% and expenses by 66%, but retained core staff who adapted all aspects of programming for the safety of our students and communities. Our Board of Directors and Executive and Development teams continue to harness our 20 years of education experience and strategically pivot within our vision of a diverse movement building communities that cherish and restore the ecosystems that sustain them. **We are incredibly grateful to our funders, most of whom have allowed funding to be unrestricted so that EPI could forge a path through and beyond the pandemic.**

### MAJOR FUNDERS

Edward L. Anderson Jr. Foundation  
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Alumbra Innovations Foundation  
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The Brock Foundation  
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The Lightfoot Foundation  
State of Montana Social Services Grant

### PROGRAM PARTNERS

**Belize**  
Toledo Institute for Development and Environment  
Belize Audubon Society  
Shipstern Nature Reserve  
Friends for Conservation and Development  
Southern Environmental Alliance  
Wildlife Conservation Society  
Ya'axche Conservation Trust

**Costa Rica**  
Pacuare Reserve  
Veragua Rainforest  
Tirimbina Rainforest  
Coastal Jaguar Conservation

Latin American Sea Turtles  
Estación Las Tortugas  
Panthera Costa Rica

**Galapagos**  
Dirección del Parque Nacional Galápagos  
Dirección Distrital de Educación Consejo de Gobierno de Galápagos  
Galapagos Conservation Trust  
Galapagos Tortoise Movement Ecology Program  
Houston Zoo  
Charles Darwin Foundation  
Litter Scientists  
Intercultural Outreach Initiative  
Casa de Cultura

**Mexico**  
Alianza Deplastifcate Center for Cultural and Ecological Studies, Prescott College, A.C.  
CERCA, A.C.  
CONANP Ecosistemas y Conservación, A.C.  
Enseña por México  
Grupo Tortuguero de las Californias, A.C.  
Perlas de Cortez  
Ponguinguola A.C.  
Red de Turismo Sustentable  
San Diego Natural History Museum  
Sociedad de Historia Natural Niparája  
Universidad Autónoma de Baja California Sur -

Ciencias del Agua  
Urbaneria

**Yellowstone**  
B Bar Ranch  
MPG Ranch  
Custer-Gallatin National Forest (Gardiner Ranger District)  
National Parks Conservation Association  
Yellowstone Bear Management Team  
Yellowstone Bison Management Team  
Yellowstone Botany Team  
Yellowstone Wolf Project



ECOLOGY PROJECT INTERNATIONAL