RUSSELL E. TRAIN EDUCATION EDUCATION ENATURE

2016 ANNUAL REPORT

Where We Work 2.340

TOTAL GRANTEES

The Russell E. Train Education for Nature Program has awarded 2,340 grants to individuals and organizations throughout Africa, Asia, and Latin America.

LATIN AMERICA

Argentina Belize

> Bolivia Brazil Chile Colombia Mexico Costa Rica Panama Ecuador Paraguay French Guiana Peru Guatemala Suriname Guyana Honduras LEGEND

> > 50-99

100+

58

GRANTEES



AFRICA Botswana **Burkina Faso** Cameroon **Central African** Republic Democratic **Republic of** the Congo Gabon Kenya Madagascar Malawi Mozambique Namibia Niger Republic of Congo

Senegal
South Africa
Swaziland
Tanzania
Togo
Uganda
Zambia
Zimbabwe

LEGEND

50-99

100+

ASIA

Armenia Bhutan Cambodia China Fiji India Indonesia Laos Malaysia Mongolia Myanmar

GRANTEES

Nepal Pakistan Papua New Guinea Philippines Solomon Islands Thailand Timor Leste Vietnam

■ 1–49 ■ 50–99

100+



STRENGTHENING CONSERVATION

I have had the honor and privilege of being part of WWF's Russell E. Train Education for Nature Program (EFN) for over 15 years. During that time, I have watched thousands of conservation professionals take on seemingly impossible challenges in their home countries and succeed. Each grantee success story reinforces the fact that we must champion more conservation leaders to solve the acute environmental challenges before us.

EFN is rare among conservation programs in that it invests primarily in individuals—promising women and men around the world who, because of EFN, are able to pursue education and in turn lead influential change in their home countries. Thanks to the generosity of WWF donors, we have already supported more than 2,300 individuals through EFN grants. They in turn have achieved extraordinary results—from discovering new species to creating new protected areas to enacting game-changing environmental legislation.

In an effort to support more deserving individuals, in 2013 EFN set the ambitious goal of doubling the number of grants awarded. I am pleased to share that we supported 223 individuals and organizations this year. This is the first time in our 22-year history that EFN has awarded over 200 grants in a year, and it represents a 92% increase since we took on the challenge of doubling our numbers. EFN is working hard to increase our funding so that we can make even bigger investments to strengthen conservation capacity in the years ahead.

We deeply appreciate the commitment and generosity of the donors who have made these impacts possible. Your gift to EFN is transforming individual lives and enabling enhanced protection of the wild places and species that capture our hearts.

Sincerely,

Andrea Santy Director, Russell E. Train Education for Nature Program

MILESTONES

SURPASSED 100 GRANTEES EFN surpassed 100 grantees in both Kenva and Bolivia—two high priority countries for conservation.



PROTECTED AREA EFN awarded ARCAS, a Guatemalan NGO, funds to conduct a reforestation project in the newly declared Hawaii Protected Area in Guatemala, ARCAS has spent nearly a decade working to have this area designated as protected.

2016



PLANTED OVER 283,399 TREES

EFN supported 15 organizations that collectively planted over 283,399 trees around the world.



AWARDED 223 GRANTS

EFN awarded 223 grants this year, the highest number of grants ever awarded in the program's 22-year history.

NEW SPECIES OF FROG

Train Fellow Harith Faroog discovered a new species of frog, *Nothophryne* nov.sp, near Quirimbas National Park 斗 in Mozambique.

PUBLICATIONS



THE GLOBAL NUMBER OF TREES HAS FALLEN Train Fellow Peter Umunav

coauthored an article in Nature that provides the first spatially continuous map of forest tree density at a global scale. The map estimates that the global number of trees has fallen by 46% since the start of human civilization.



HUMAN-WILDLIFE CONFLICT

Train Fellow Thakur Silwal published two articles examining humanwildlife conflict in Chitwan National Park. The park was Nepal's first protected area and it supports the largest populations of the species most commonly involved in attacks, such as rhinos, tigers, and elephants. This research is a step toward minimizing conflicts with people.

Accomplishments

AWARDS

NATIONAL GEOGRAPHIC **EMERGING EXPLORERS**

For their fantastic species work, Train Fellow Thandiwe Mweetwa and **Reforestation Grant recipient Panut** Hadisiswoyo were named 2016 National Geographic Emerging Explorers.



DISNEY CONSERVATION HEROES Professional Development Grant recipients Jonah Ratsimbazafy and Jeneria Lekilelei were named Disney Conservation Heroes.



YEARS OF CONSERVATION EXCELLENCE

Train Fellow Suzana Padua and her husband Claudio Padua received the Cincinnati Zoo's 2016 Wildlife Conservation Award in honor of their 30 years of conservation work in Brazil.

EVENTS

TRAIN FELLOW VISIT

EFN brought together 10 Train Fellows for a weeklong visit in Washington, DC. The fellows shared vital research with WWF staff and attended key conservation events, including the Fuller Symposium.

isolation, to the Conservation Asia

CONFERENCE

Conference in Singapore. For eight of the participants, it was their first opportunity to attend an international conference and share their work.

CONSERVATION ASIA

Myanmar, a country emerging

EFN sent 12 conservationists from

from more than 50 years of global

ANNUAL SYMPOSIUM ON SEA TURTLE BIOLOGY AND CONSERVATION

For the first time, a South American country—Peru—hosted the Annual Symposium on Sea Turtle Biology and Conservation. The event was organized and led by Professional Development Grant recipient and Whitley Award winner Joanna Alfaro.



WORLD RANGER CONGRESS

According to research presented by Elodio Davalos Mayhua, the number of Andean bears has doubled in the Machu Picchu Historic Sanctuary, Elodio was able to share the findings at the World Ranger Congress in Colorado with funding from EFN. In total, EFN supported 12 individuals to attend the event.

3



RUSSELL E. TRAIN

Russell E. Train, renowned conservationist and EFN's namesake, passed away in 2012. Upon hearing the news of his passing, people from around the globe sent generous donations toward continuing his legacy of building conservation capacity worldwide. These memorial contributions are being used to support the Russell E. Train Legacy Scholarship Program.

ANNOUNCING THE RUSSELL E. TRAIN

Legacy Scholarship Program

Educational opportunities in developing countries remain very limited. This is especially true within conservation, a field that is underrepresented even in developed countries. To help support the growth and expansion of educational opportunities in WWF priority places, EFN has launched the Russell E. Train Legacy Scholarship Program. In the coming years, this program will provide financial support to new or growing academic programs at universities in six WWF priority countries: Brazil, Bhutan, Guyana, Laos, Cameroon, and Tanzania

EFN officially launched the program in Bhutan this year. In collaboration with WWF-Bhutan and the Greater Himalavan Foundation, EFN is supporting six students in earning undergraduate degrees in environmental management from Royal Thimphu College. The goal is to fund 18 students over the course of five years and to build up Bhutan's environmental management capacity. One of the scholarships awarded each year will honor the late Mingma Norbu Sherpa, who made significant contributions to conservation in the Eastern Himalayas both before and during his time with WWF.

Altogether, the Legacy Scholarship Program will support nearly two dozen students per year in their pursuit of undergraduate and graduate degrees at universities in their home countries, while providing much needed financial support to new and expanding academic programs within these universities.





In 2013 Trang founded WildAct, an organization dedicated to conserving threatened species and ecosystems in Vietnam.



Vietnam **C** TRANG NGUYEN

WILDLIFE

The world's most iconic and endangered species are secured and recovering in the wild

In the past decade, over 6,000 rhinos have been killed in Africa and Asia for their horns. Although international trade in rhino horn is banned, demand is still high in Asian countries, where it is used in traditional Asian medicine. If poaching continues at the current rate, rhinos could be extinct by 2022.

Growing up in Vietnam—the largest market for rhino horn—Train Fellow Trang Nguyen witnessed firsthand wildlife being used for medical purposes. Now, she wants to dig deeper into the complexity of the issue as a doctoral student at the University of Kent. With a Train Fellowship, she will conduct one of the first investigations of the wildlife products market and its connections with traditional Asian medicine. By researching trade hotspots, types of products, and consumers, Trang will generate new information about the wildlife trade that can strengthen law enforcement in Vietnam and help prevent illegal trafficking.



CLIMATE

Create a climate-resilient and zero-carbon world, powered by renewable energy



Bolivia is particularly vulnerable to the impacts of climate change. Even though it is far-removed from the ocean, higher temperatures on the South American coast and in the Amazon bring increasingly intense rainfall. This in turn leads to flash floods and mudslides that threaten the country's ecosystems, infrastructure, crops, and people. Throughout the country, communities are finding it difficult to respond quickly and effectively to these disasters.

Juan Carlos Medrano Vargas, a conservation-focused teacher at the Bolivian Indigenous University, knows the importance of risk management. With EFN support, he attended a Climate Resilience to Natural Hazards course hosted by the Tropical Agricultural Research and Higher Education Center, an international institution that promotes sustainable natural resource management in Latin America. Inspired by what he learned, he shared his new knowledge and skills with the next generation of conservationists: his students. Together they are analyzing risk management projects and actively working with Bolivian communities to find ways to reduce their vulnerability to disasters.

Bhutan **SANGAY DORJEE**

Bhutan is the only carbon negative country in the world. This remains true thanks to the conservation efforts of forestry personnel working under the Department of Forests and Park Services."

Bhutan upholds a deep commitment to natural resource conservation. Over 80% of the country is covered in forest, and the constitution mandates that 60% of Bhutan must remain forested in perpetuity. Today, however, Bhutan's conservation efforts are under tremendous pressure as the country's growing and youthful population welcomes modernity, urbanization, and development. There is a critical need to build up Bhutan's natural resource management capacity to respond to these changes—a view championed by Sangay Dorjee, chief forest officer for the Department of Forests and Park Services.

With a Professional Development Grant, Sangay attended a two-week International Ranger Training course hosted by Colorado State University's Center for Protected Area Management. The course focused specifically on development and the depletion of natural resources. Sangay is incorporating the scientific and technical knowledge he acquired into the first-ever conservation management plan for Jomotshangkha Wildlife Sanctuary, a transboundary reserve between Bhutan and India that is home to Bengal tigers and Asian elephants. Under the management plan, the sanctuary will conduct the first mammal, bird, vegetation, and socioeconomic surveys, establishing a better understanding of the natural resources available and how to sustainably use them.

FORESTS

Conserve the world's most important forests to sustain nature's diversity, benefit our climate, and support human well-being





Cameroon

OCEANS

A resilient ocean sustains marine life and functioning ecosystems that support rich biodiversity, food security, and sustainable livelihoods

Sea turtles play a key role in keeping our marine ecosystems healthy. They maintain seagrass beds and coral reefs, providing habitat for other valuable species. Despite their importance, research on sea turtles is often limited and the lack of information leaves them exposed to threats like bycatch, habitat destruction, and poaching.

To fill these critical research gaps, Train Fellow Henry Abi Nibam is pursuing his PhD in biodiversity and evolutionary biology at the University of Valencia in Spain. Henry will be studying the evolutionary ecology of sea turtles, examining their migratory routes and responses to environmental stressors along the coastlines of southern Cameroon, his home country. Henry, in partnership with local organizations, has been actively lobbying for the creation of the first marine national park in Cameroon's Kribi coastal area. The region is currently unprotected and is home to manatees, sharks, and other endangered species in addition to sea turtles. Henry believes his research will provide additional evidence needed to establish the protected area.

Since 2014, EFN has offered special grants to build capacity for conservation leadership in Mozambique. To date, we have supported 65 Mozambican organizations and individuals.

Mozambique O LUPA

FOOD

Drive sustainable food systems to conserve nature and feed humanity

Agriculture is a key piece of Mozambique's economy, contributing to more than a quarter of its GDP and employing 80% of the workforce. The country boasts large amounts of fertile farmland, giving it the potential to be an agricultural center for Africa. Despite these facts, about one-third of the population struggles with food insecurity. Unpredictable cycles of droughts and floods in recent years have exacerbated the problem and caused small-scale farmers throughout the country to suffer.

LUPA, a conservation organization in Mozambigue, is determined to find long-term solutions to food insecurity. In partnership with the Legado: Namuli initiative, LUPA realized that communities in the Mount Namuli region did not have the proper training to produce nutritional and climate-resilient crops. With a Conservation Workshop Grant, they held a training on permanent agriculture, a type of farming that uses low-cost sustainable production technologies and methods. The newly introduced approaches will help households to produce more crops with a higher nutritional value all year round, helping them better prepare for and bounce back from natural disasters.



FRESHWATER

Improve or maintain the health of the world's major basins for people and nature, contributing to the achievement of the sustainable development goals Guatemala's freshwater resources are under threat. Excess precipitation is causing pesticide-laden runoff to flow from oil palm plantations into waterways. Invasive river species are also compromising rivers and streams. These problems, in combination with a lack of environmental standards, jeopardize the wetlands of Guatemala and the livelihoods of the communities who live there.

Train Fellow Yasmin Morales is pursuing her PhD in ecology at the University of Florida. She is examining how economic activities affect the network of rivers that run through northern Guatemala. In addition to the threats of invasive species and plantation runoff, there are plans to build a large hydropower plant on the Usumacinta River, a critical waterway stretching over 600 miles. With little regulation, building the plant would negatively impact not only the ecosystems but also the communities who depend on the river for food and income. Yasmin's research will provide the government with important baseline data it can use to create management plans to conserve river health for both wildlife and people.

CONCRATURATIONS 2016 TRAIN FELLOWSHIP RECIPIENTS

BHUTAN

Kinley Choden Tashi Dhendup Tshering Dorji

BOLIVIA Pamela Liliana Claure Gutierrez

CAMEROON

Henry Abi Nibam

ECUADOR Segundo Bolier Torres Navarrete

GUATEMALA Yasmin Morales

GUYANA

Jewel Liddell

KENYA

Kevin Opondo Mercy Waithira

LAOS

Vilanath Koumphon Koudkeo Phommachan Xayyasith Phommachanthone Chaikeo Saengsulin Kamdet Sayyavong Sengvilay Seateun Keooudone Souvannakhoummane Houan Vorasane

MOZAMBIQUE

Harith Omar Morgandinho Farooq Aires Mbanze Muri Goncalves Soares

MYANMAR

Kyaw Moe Oo Pyae Sone Soe Thin Thwe Thwe

NAMIBIA Emilia Haimbili

NEPAL Jagadish Parajuli Shambhu Paudel Sandeep Shrestha

TANZANIA

Hussein Luswaga

UGANDA

Tutilo Mudumba Nicholas Muhesi Caroline Mwebaze

VIETNAM

Trang Nguyen Hoang Thach Nguyen Van Thanh

Announcing 2017 TRAIN FELLOWSHIPS



Every year EFN awards Russell E. Train Fellowships to a select group of committed conservationists working on WWF priority issues. With financial support, Train Fellows are able to attend leading universities, conduct critical research, and return home better equipped to take on global conservation challenges.

EFN IS PLEASED TO ANNOUNCE THE 2017 TRAIN FELLOWSHIP OPPORTUNITIES

Building Capacity in Climate Change, Adaptation, and Resilience for Conservation

Eligible Countries: Colombia, Ecuador, Fiji, Guatemala, Madagascar, Papua New Guinea, Paraguay, Solomon Islands, Uganda, Vietnam, Zambia

Building Capacity in Sustainable Food Systems and Conservation

Eligible Countries: Cambodia, Central African Republic, Gabon, Kenya, Laos, Madagascar, Namibia, Republic of Congo, Vietnam, Zambia

Conservation in Mozambique and Myanmar

Eligible countries: Mozambique and Myanmar only

Current & Aspiring University Faculty for Conservation

Select countries in Africa, Asia, and Latin America. For a full list of eligible countries please review online guidelines.

RUSSELL E. TRAIN EDUCATION FOR NATURE PROGRAM

The Russell E. Train Education for Nature Program fills a critical funding gap by providing financial support to proven and potential conservation leaders for training and education. Through these opportunities, leaders gain the knowledge and skills they need to address conservation challenges in their home countries.

Degree Programs

Russell E. Train Fellowships and Scholarships support individuals in pursuing advanced degrees.

Short-term Training

- Professional Development Grants support conservation professionals' attendance of short-courses and conferences.
- Alumni Grants are available to individuals who have previously received funding.

Local Conservation Training

- Conservation Workshop Grants support local organizations in conducting workshops in their communities.
- Reforestation Grants support organizations in conducting reforestation and restoration projects.

SOY INK

Cover Photo: Eduardo Justino Salvador is a professor at the Gurue Institute of Agriculture and a Conservation Workshop participant from Mozambique. © GRANT BEMIS/LEGAD0



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