EFNews

BUILDING THE FUTURE OF CONSERVATION JULY 2012

The population of the greater one-horned rhinoceros (Rhinoceros unicornis) is on the rise in Nepal. – Photo courtesy of B.R. Lamichhane

EFN grantee Babu Ram Lamichhane explains why, and how, he counts rhinos

CHITWAN NATIONAL PARK, NEPAL – Throughout the world, EFN grantees are engaged in important conservation work. We interviewed EFN Professional Development Grantee Babu Ram Lamichhane, a conservation officer for the National Trust for Nature Conservation's Biodiversity Conservation Center in Sauraha, Nepal. We asked about his work on last year's rhinoceros census and the future of the endangered species in Nepal.

EFN: You worked April 5-23, 2011, on the rhinoceros census in Chitwan National Park. What was your role?

BRL: My role was to collect and enter data from all observers (enumerators), maintain the database, and prepare maps for the next day's coverage. But I also went into the field as an enumerator and was actually the first enumerator to record rhinos for the census.

EFN: How exactly did you count the rhinos?

BRL: The census method is based on direct count of individual rhinos while sweeping through all possible rhino habitats. The area is divided into different survey blocks. Each block is systematically searched by enumerators on 35 to 40 elephants. The elephants and observers move forward in a parallel line, clapping and making noise so that the rhinos, even if sleeping or resting, wake up and come closer to be recorded. Each observer travels with GPS on track logging mode and records every observation

Napoleon Chi helps convert a destructive species into a useful product. (Story, p. 3)

In this issue...

Russell E. Train Education for Nature Program

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More than 150 people and 35-40 elephants participated in the Nepal rhino census. The next census is planned for 2015. – Photo courtesy of B.R. Lamichhane

in addition to demography, time, GPS locations, a photograph, if possible, and identifiable features. Each observation is verified and cross-checked daily. The team moves to the subsequent block the next day and also records if an animal moved in or out of that particular survey block.

EFN: The process sounds challenging.

BRL: Rhino count is a big event for conservationists in Nepal. It requires a large amount of resources as well as coordinated teamwork. Mobilizing 150 people and 35 to 40 elephants in a remote jungle with limited access is not an easy task.

EFN: Why do you use elephants?

BRL: Chitwan is famous for its biodiversity, including a high density of tigers (125 breeding adults), and its vast grasslands up to seven meters tall—too high and too dangerous to conduct the census by foot. Elephants are the best means of transportation, as they can go off road. All of the elephants used were captive elephants already trained for wildlife research.

EFN: Why is the census necessary?

BRL: Regular monitoring of any wildlife population is necessary to understand its conservation status, identify threats, and initiate timely action for better management. In many cases, the success of conservation action in Nepal is measured on the increase or decrease of the rhino population.

In Nepal, rhinos are found in Chitwan National Park, Bardia National Park, and Suklaphanta Wildlife Reserve. Chitwan is the source population of all remaining rhinos. More than 800 rhinos lived there until the 1950s, when people migrated to the area. Rhino numbers dropped to less than 100 as early as the mid-1960s. Realizing the threat of extinction, Nepal established Chitwan National Park in 1973. After three decades of strict protection, the rhino population rose to 544 in Chitwan. However, during the Nepali Civil War, poaching incidents increased drastically, leaving only 372 animals in Chitwan, according to the 2005 census. After the war's resolution in 2006, park security improved, and the country has since seen a gradual increase in the rhino population.

EFN: What were the results of last year's census?

BRL: The results show that there are 534 free-ranging rhinos in Nepal, an increase of 99 individuals since the last count in 2008. Chitwan National Park has seen a significant increase of 95 individuals. Bardia National Park and Suklaphanta Wildlife Reserve have 24 and seven rhinos, respectively.

EFN: When is the next census? What do you think is the future of rhinoceroses in Nepal?

BRL: The next census is planned for 2015. Experience shows that if poaching is controlled, the rhino population can survive. Thus, preventing rhinos from being poached is the top priority. As rhinos in Chitwan are shifting from east to west, habitat management seems to be the next immediate priority. The rhino population of Nepal, especially Chitwan, has shown remarkable success, but the small populations in Bardia and Suklaphanta are not viable without supplementation. Discussions are ongoing for internal translocation, as well as translocation from Chitwan to Bardia.

Last year was extraordinarily successful for curbing poaching through enhanced security and mobilizing an intelligence network. The government of Nepal has given special priority for the conservation of rhinos. There is also high public awareness among local communities and the media, and there is a range of local, national, and international NGOs working on different aspects of rhino conservation. Looking at all of this, the future of rhinos is promising in Nepal.

Napoleon Chi in a boat on Lake Ossa, Cameroon, holding water hyacinth. - Photo courtesy of N. Chi

Changing Devils to Angels in Cameroon

The water hyacinth plant *Eichornia crasipes* has been called the world's worst water weed. In Cameroon, this invasive aquatic floating plant is considered a devil by many coastal communities because of its negative impact on local ecosystems, habitats, and infrastructure.

Water hyacinth proliferates rapidly, annihilating local flora and fish species. It also extracts oxygen from the air; slows the water flow rate, affecting hydroelectric power generation; and increases sedimentation as it decomposes. The Port Authority of Douala, based at the Wouri estuary, spends 5 billion CFA francs each year dredging mud and sediments contributed in part by decomposed water hyacinth. In addition, the plant obstructs navigation to remote villages—some regions have seen reduced economic activity because it can take more than 10 hours to navigate canoes through waterways when trips used to take just two hours.

However, the water hyacinth plant also has positive aspects. It has been found to be transformable into useful products ("angels") that can enhance the livelihood of local communities. It is a good indicator for pollution, acts as a biological filter by absorbing dangerous heavy metals in the water, and mitigates climate change by taking in carbon dioxide from the atmosphere as it multiplies. It can also be transformed into arts and crafts pieces, such as bags, posters, and chairs, and even food for humans and some animals, such as pigs. A report by Cameroon's Ministry of Environment, Nature Protection, and Sustainable Development found that the negative impacts outweigh these positive aspects. However, in the process of mechanically removing the plant from these bodies of water, communities benefit when they are trained on how to convert the water hyacinth into these useful products.

Thus began a project to promote the use and transformation of the water hyacinth into a livelihood-improvement opportunity—to transform this perceived devil in to an angel—an initiative that falls in line with the Convention on Biological Diversity. Specifically, the objectives were to inform the population of the plant's environmental impacts; educate water hyacinth valorization into paper, compost, and crafts; and implement, monitor, and evaluate the project within the host community.

The project was first initiated in 2005 in a small village called Bonendale at the Wouri Estuary by the Douala council's Watershed Task Group, with financial support from the International Union for the Conservation of Nature, Pecten Cameroon Company, and an EFN Conservation Workshop Grant.

The results were successful: The initiative helped reduce dredging expenses by 20 percent and reduced the navigation time for some local boat riders from two hours to 10 minutes. In addition, certain ecosystem services, such as fisheries and ecotourism, were restored, further improving the livelihood of the communities and mitigating the negative impacts of water hyacinth proliferation. The project also spurred Cameroon to adopt a national strategy for integrated control of water hyacinth. In 2006 the country signed the Ramsar Convention on Wetlands, and from 2010 to 2012 the Ministry of Environment, Nature Protection, and Sustainable Development implemented the project on a nationwide scale.

Napoleon Forpah Chi was awarded a Professional Development Grant in 2003 to attend the East Africa Wetland Management Course held by the Kenya Wildlife Service. For nearly a decade, Napoleon has helped lead efforts to improve watershed management in Cameroon. In 2008, the country's prime minister appointed him as chairman of the Tender Board for Projects in the Douala IV Urban Council to see that environmental factors are taken into consideration during the planning of major infrastructure projects.

The Russell E. Train Wall

As visitors enter the reception area of the WWF building in Washington, D.C., they are greeted by a nearly life-size photo of Mr. Russell E. Train, WWF founder, past president, past chairman of the board, and current chairman of the board emeritus. Russ Train is a U.S. conservation legend for leading WWF and playing an instrumental role in creating the Clean Air Act while serving as head of the Environmental Protection Agency (EPA) under President Richard Nixon. The Russell E. Train Education for Nature Program (EFN) was dedicated in 1994, upon his retirement as chairman of the board of WWF. In 2009, in honor of EFN's 15th anniversary, WWF created the Russell E. Train Wall to highlight Mr. Train's contributions to conservation and the contributions of the more than 1,500 EFN grantees around the world.

Each year, EFN features six grantees on the Russ Train Wall. These short bios are seen by hundreds of visitors a year and help raise awareness about the important work our grantees are engaged in. Please join us in recognizing this year's featured grantees.

William Nauray, a Train Fellow, knew that the Transoceanic Highway being cut through remote Amazon forest in his native Peru would change the landscape forever. To establish a baseline against which to measure the road's impact, he raced to document orchids, a species highly sensitive to environmental change. In one month, William identified more than 100 orchid species and discovered three new species. EFN's funding of field work by graduate students has led to cutting-edge research and discovery of new species.

Margarita Hurtado is a dedicated environmental educator who has developed national environmental education (EE) curricula in Mexico, created learning games and tools, and written several EE teacher training manuals. As part of her EFN-supported master's thesis, in 1999 Margarita created an EE pilot program for the state of Morales. That program is now being used by 2,800 students at 70 high schools. EFN's support of academic advancement for environmental educators is essential to training future conservation leaders.

Hantanirina Rasamimanana, known as Madagascar's "Lemur Lady," has dedicated much of her life to protecting lemurs and their habitat. EFN supported her doctoral research on this signature Malagasy species. A July 2010 episode of CNN's *African Voices* highlighted her work with lemurs and the inspiration she provides to the next generation of Malagasy biologists. Train Fellowships are behind a number of scientists who have become recognized role models for environmental change in their countries.

Napoleon Chi's work on the management of wetland resources in the Douala Estuary and Lake Ossa in Cameroon has been supported by EFN since 2003. In 2011, his collaboration with a local NGO and the Cameroon government converted a destructive invasive wetland species into a tool for sustainable livelihoods for the local community. EFN supports conservation leaders who find innovative ways to address pressing environmental issues.

Prigi Arisandi has inspired thousands of people to become advocates for river protection in Indonesia. Since 2004, EFN has supported his work to encourage youth and community participation in preserving and restoring the Surabaya and Brantas rivers, which provide water to 3 million people. In 2011, he received the prestigious Goldman Environmental Prize for his work to stop industrial pollution in the Surabaya River. EFN is dedicated to supporting local environmental leaders who inspire and motivate their communities.

Radha Wagle became the first female conservation officer at Nepal's Department of National Parks and Wildlife Conservation after completing her bachelor's degree with funding from EFN. She has worked in both Royal Bardia and Chitwan national parks. In 2007, she completed her master's degree in the management of biological diversity. EFN empowers women to advance in the field of conservation and effectively participate in conservation efforts in their home countries.

Russell E. Train Education for Nature Program

EFN Opportunities

Current and Upcoming EFN Grant, Fellowship, and Workshop Opportunities

NOW ACCEPTING APPLICATIONS

EFN - Select WWF Priority Place Areas

Professional Development Grants

These grants provide support for mid-career conservationists to pursue short-term, non-degree training to upgrade their knowledge and skills through short courses, workshops, conferences, and study tours, or through practical training such as internships and professional attachments. Professional Development Grants are awarded throughout the year, on a first-come, first-served basis, given the availability of funds.

NOW ACCEPTING APPLICATIONS

EFN - Select WWF Priority Place Areas

Conservation Workshop Grants

These grants support nongovernmental organizations, community groups, government agencies and educational institutions in conducting training workshops. Costs covered include travel expenses, meals and accommodations, room rentals, materials, and other related costs. Administrative costs should be no more than 15 percent of the requested amount. Typical grants are between US$1,500 and US$7,500.

NOW ACCEPTING APPLICATIONS

EFN - Past Russell Train Fellows and Scholars Only

EFN Alumni Grants

These grants provide support for ongoing education and training for former Russell E. Train Fellows or Scholars who have earned a degree through EFN. Alumni Grants are awarded throughout the year and may be used to support short-term training, attend a workshop, present at a conference, or to conduct research within a WWF priority place.

NOW ACCEPTING APPLICATIONS

Women Conservationists - Congo Basin Only

Professional Development Grants

These grants support women conservationists in the Congo Basin who wish to do short-term training that enhances skills necessary for effective conservation work and career advancement. Applicants must be currently employed in conservation at a government agency, protected area, NGO, or educational institution. They must also have leadership potential and a commitment to conservation in their home countries. The grant covers training costs up to a maximum of US$5,000.

NOW ACCEPTING APPLICATIONS

Women Conservationists - Congo Basin Only

Scholarships for Certificate/Diploma Training

These grants provide support to women conservationists for pursuit of certificate or diploma courses. These scholarships will allow women in the Congo Basin to gain much-needed formal conservation qualifications. Scholars receive financial support for education-related costs for a period of about one year, and the grant covers costs up to a maximum of US$10,000. Study can take place anywhere in the world. Application deadline is August 1, 2012.

HOW TO APPLY

To apply for an EFN grant, please visit our website at worldwildlife.org/efn. Each program has unique application guidelines. Please read the guidelines carefully before you apply. EFN encourages past grantees to share these grant resources with your colleagues and partners in the field.

EFNotes from the Field

2002

Gustavo “Sebastian” Cabanne
Argentina

Russell E. Train Fellow

After finishing his PhD in biology at the University of Sao Paulo, Brazil, in 2009, Gustavo “Sebastian” Cabanne returned to his native Argentina to pursue a career in conservation at the federal level as a researcher in the Ornithology Division of the Argentinean Museum of Natural Sciences in Buenos Aires. There he is involved in a variety of research projects that focus on the evolution of birds throughout South America.

His research has led to important discoveries about the genetic differences among regional bird populations and helped determine that two endangered bird populations are in fact new species—the Northern Lesser Woodcreeper (*Xiphorhynchus atlanticus*) and the Northern Rufous-Breasted Leaftosser (*Sclerurus cearensis*). Recognizing those endangered birds as species is an important distinction and has direct impact for local, regional, and international conservation efforts. Sebastian’s work has also led to numerous publications and studies, including articles in *Molecular Ecology* and *Molecular Phylogenetics and Evolution*.

2005

Alex Kisingo
Tanzania

Russell E. Train Fellow

Alex Kisingo spent his childhood on the Serengeti, where he watched animals migrate across an increasingly degraded landscape. He followed his passion for animals, completing his bachelor’s degree and several advanced certificates in wildlife management in his native Tanzania. At age 25, Alex became an assistant lecturer at the College of African Wildlife Management–Mweka (CAWM), where he taught undergraduate and graduate courses on wildlife ecology, range management, tourism, and land use planning, among others. In 2005 Alex was selected for a Russell E. Train Fellowship to pursue a master’s in wildlife management and conservation at the University of Reading, United Kingdom. He then returned to Mweka, where he was promoted to conservation biologist and lecturer at CAWM.

Today, Alex continues his education and research as a PhD student in geography at the University of Victoria, Canada, where he is focusing on the socio-ecological governance of protected areas in the Serengeti ecosystem. He hopes to influence conservation decision making in East Africa and publish training manuals on issues of conservation management, ecology, and planning.

2010

Caroline Lumosi
Kenya

EFN Professional Development Grantee

Caroline Lumosi was recently awarded the Future Conservation Award though the Conservation Leadership Programme. She became the team leader on a project that surveyed the critically endangered Aders’ duiker (*Cephalophus adersi*) in Arabuko-Sokoke Forest, a coastal forest in Kenya, through camera-trap technology. The most recent survey conducted confirmed the antelope species population has drastically reduced due to hunting and habitat destruction. Caroline hopes the study will help build community awareness about the importance of the Aders’ duiker and generate sustainable income for local communities through ecotourism.

In 2010 Caroline received an EFN Professional Development Grant to attend the Sustainability Through Social Entrepreneurship course offered by Activating Talent in Sustainability in Colombia, South America. A project officer at the Ecological Society for Eastern Africa, Caroline found herself struggling to balance her research while teaching local communities to empower and sustain themselves. She was one of 33 participants from 23 different countries and learned how to develop a viable business model to implement entrepreneurial solutions to sustainability challenges.

All snapshots courtesy of grantees.

2006

Mariana Montoya
Peru
Russell E. Train Fellow

In 2010 Mariana Montoya completed her PhD in geography and environment at the University of Texas, USA, and defended her thesis, "How access, values, and history affect the sustainable extraction of fish and timber for an Amazonian indigenous group: The Kandozi of the Pastaza River of Peru." Her research shows, in part, that conservation programs need to incorporate social, economic, cultural, and political considerations in addition to environmental concerns. Earning this degree culminated more than 10 years of work for Mariana, who began at WWF Peru, where she designed and implemented fresh water conservation programs and worked closely with indigenous communities to promote sustainable use of natural resources. In addition to earning her doctoral degree, she has also co-authored six published articles and worked as a consultant for various NGOs.

Mariana is currently scientific director at the Wildlife Conservation Society in Lima, Peru, where she helps position WCS Peru as the leading organization in providing relevant scientific information for environmental policy development, effective management of protected areas, and sustainable management of wildlife and Amazonian fisheries.

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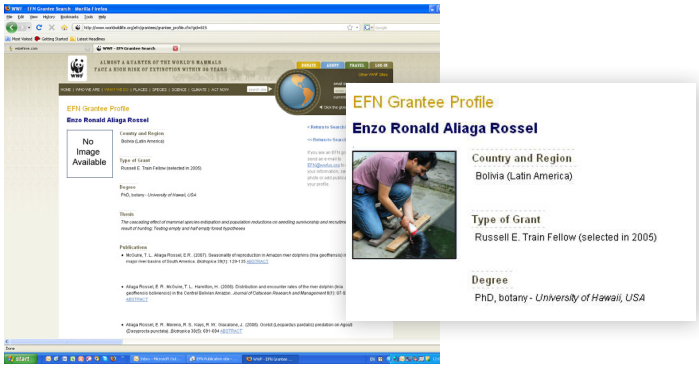
Contribute to EFN's Grantee Database!



EFN has a grantee database where visitors can view short profiles of grantees, as well as any publications they have authored.

Grantees are invited to submit citations for their conservation-related publications to efn@wwfus.org.

worldwildlife.org/efn/grantees

WWF congratulations EFN Professional Development Grantee Joanna Alfaro Shigueto for winning a 2012 Whitley Award. Joanna was recognized for her marine conservation work through the empowerment of coastal fishing communities in Peru. Above, she receives the award from Her Royal Highness The Princess Royal. - Photo courtesy of the Whitley Awards

STAY CONNECTED TO EFN

EFN is now on LinkedIn

under the group

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Connect to EFN to share information, network, and exchange ideas with our more than 1,500 grantee worldwide.

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