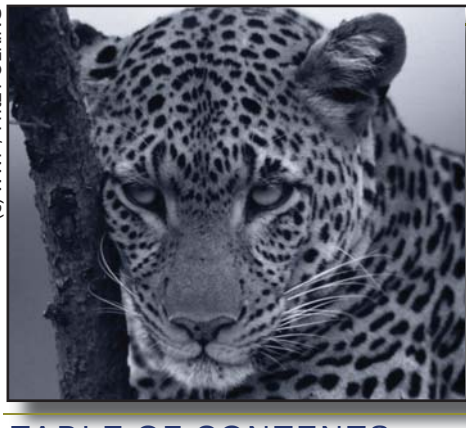
Russell E. Train
Education for Nature Program

EFN News

April-October 2007

BUILDING CAPACITY FOR CONSERVATION LEADERSHIP



(c) WWF / Fritz PÖLKING

Den Selection of the Giant Panda in Foping Nature Reserve, China

by Xinping Ye, China (2003) Russell E. Train Fellow

The giant panda (*Ailuropoda melanoleuca*) is recognized as one of the most endangered species in the world and, in the past two decades, an overwhelming effort has been devoted to its conservation. As a K-strategy species, characterized by the production of fewer offspring, slow maturity rates, and an inability to maintain populations in unstable ecosystems, the giant panda is extremely sensitive to environmental changes, especially during its breeding season. The mortality of giant panda pups in the wild is quite high because of predators and ecosystem instability. A suitable natal den and den site are vital for the survival of a giant panda's offspring. During this denning period, the mother spends most of the time with her pup in the den. A female giant panda gives birth and fosters her offspring in the den for 100–130 days. There are two elementary functions of dens: one is to evade predators and the other is to maintain a stable microenvironment for rearing offspring.

Xinping Ye

Although it is important to understand the effects of the physical structure of natal dens and den-site characteristics on the breeding success of giant pandas, limited information exists about the den selection of this species in its natural habitat. In the Minshan Mountains of Sichuan, the giant panda mainly uses a large hole in the lower part of conifer trees as a natal den. In contrast, the giant panda in Qinling Mountains prefers to use natural limestone caves to give birth and foster offspring. So far, the giant panda's den and microhabitat selection, especially den-site selection, remains unknown.

In July 2003, a research project was launched to study the characteristics and selection of natal dens by the giant panda in Foping Nature Reserve. Fieldwork was mainly carried out during the winters of 2004 and 2005 and included the investigation of 32 natal dens and 32 reference caves, which were used as a benchmark for comparison.

The study showed that there were several significant differences between the giant panda natal dens and the reference caves. Most of the natal dens were located beneath cliffs with bamboo cover and had short visibility through the front of the enclosure, which was in contrast to the reference caves. Natal dens were much better than the caves at protecting giant pandas from rain and were located on a south or southeastern slope in the reserve, which were higher and steeper than where the reference caves were positioned.

To learn more about the Russell E. Train Education for Nature Program, please contact:

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2007 New Russell E. Train Fellows

EFN recently awarded Russell E. Train fellowships to 19 exceptional conservationists from six countries in Latin America. Train Fellows receive financial support for education-related costs for a period of up to two years. Study can be at the master's or doctoral level and can take place anywhere in the world. Please visit the EFN Web site at www.worldwildlife.org/efn for more information on our grantees and the fellowship program.

BOLIVIA

Ramiro Luis Cartagena Chávez, Ph.D. in geography, Universidad Nacional Autónoma de México, Mexico

Verónica Lizet Chávez Calvimontes, Ph.D. in geography, Goettingen University, Germany

Carlos Israel Molina Arzabe, Ph.D. in biology, Universidad Mayor de San Andres de Bolivia, Bolivia

Carlos Israel Molina Arzabe, Bolivia

Boris Ríos Uzeda, M.S. in ecology and conservation, Universidade Federal de Mato Grosso do Sul, Brazil

Rodrigo W. Soria Auza, Ph.D. in biodiversity conservation, Goettingen University, Germany

COLOMBIA

Carlos Luis del Cairo Silva, Ph.D. in anthropology, University of Arizona, United States

Mireya Patricia Córdoba Sánchez, Ph.D. in biology, Universidad Nacional de Colombia, Colombia

Catalina Gómez Salazar, M.S. in ecology, Dalhousie University, Canada

Pablo Hernan Jamioy Juajibioy, M.S. in environmental management and sustainable development, Pontificia Universidad Javeriana, Colombia

ECUADOR

Jesús Antonia Bonilla de Gracia, M.S. in environmental and natural resource socioeconomics, Universidad Nacional Agraria La Molina, Peru

Diego Francisco Cisneros Heredia, M.S. in environmental management, King's College London, United Kingdom

Santiago Rafael Espinosa Andrade, Ph.D. in wildlife conservation, University of Florida, United States

GUYANA

Linet Cynthia Watson, Ph.D. in fish and wildlife biology and management, State University of New York at Syracuse, United States

Catalina Gómez Salazar, Colombia

Carlos Luis del Cairo Silva, Colombia

MEXICO

Luis Carlos Santander Botello, Ph.D. in geography, Universidad Nacional Autónoma de México, Mexico

Carmen Amelia Villegas Sánchez, Ph.D. in marine science, Centro de Investigación de Estudios Avanzados del Instituto Politécnico Nacional, Mexico

PERU

Juan Alex Álvarez del Castillo, Ph.D. in development studies, Institut Universitaire d'etudes de Developpement, Switzerland

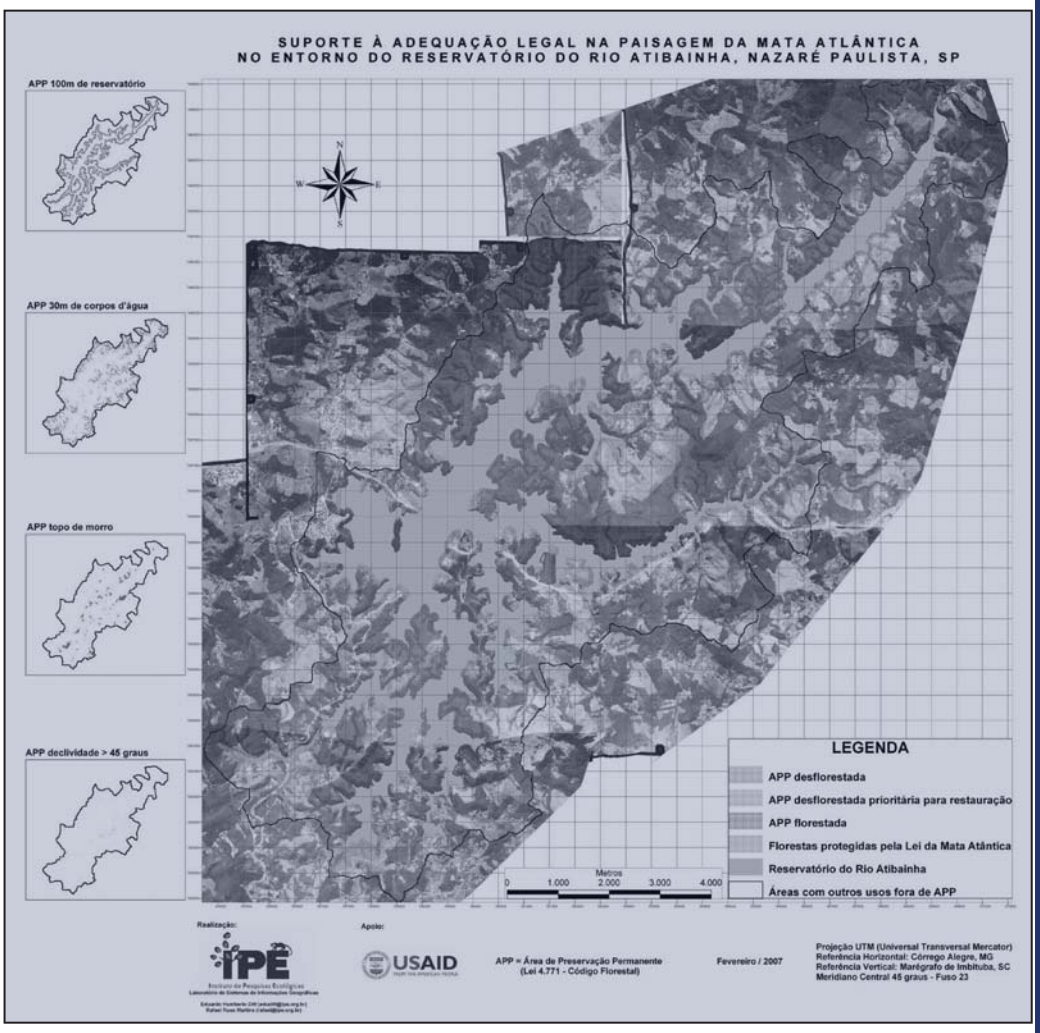
Renzo Giudice Granados, M.S. in environmental economics, University of East Anglia, United Kingdom

Victor Juep Bakuants, Ph.D. in environment and sustainable development, Universidad Nacional Federico Villarreal, Peru

Norma Salinas Revilla, Ph.D. in geography and environment, Oxford University, United Kingdom

The Dream Map: Influencing Landscape Planning and Conservation of the Atlantic Forest Using Doctoral Research Funded by EFN

Eduardo Ditt is a researcher at the Instituto de Pesquisas Ecológicas (IPÊ, or Institute for Ecological Research) in Brazil. In 2004, he received funding from EFN to finance his dissertation research in the Atlantic Forest in Brazil. Ditt's dissertation involves an assessment of the extent to which forest legislation is being respected. The gaps that his study identified in law enforcement were used to indicate where local decision makers should focus their attention. For instance, deforestation has been observed in more than 50 percent of riparian areas, although a federal law states that the areas should be covered with forests. His Ph.D. study is integrated with other IPÊ conservation projects, including landscape analysis, local fauna research, and environmental education for local communities. The main focus is to promote biodiversity conservation in accordance with the forest laws and to improve the quality of life for local residents.



In February 2007, using Ditt's research as a basis for discussion, a team of researchers at IPÊ organized a seminar for decision makers to discuss the challenges and opportunities that arise from integrating efforts on landscape planning, conservation, and restoration of the Atlantic Forest. The seminar focused specifically on the forest located in the eastern portion of São Paulo state. The main stakeholders included the public prosecutor, IBAMA (the enforcement agency for the Brazilian Ministry of the Environment), the State Department of Protection of Natural Resources, local authorities and landowners, Sabesp (a company that provides basic sanitation in São Paulo state), the municipal government, local entrepreneurs, and nongovernmental organizations. Ditt presented a map showing the results of his research to the participants of the seminar so they could prioritize areas for forest restoration.

The seminar resulted in an outstanding commitment from many stakeholders and general participants to adopt recommendations of landscape management as specified in the map. The local public prosecutor, who attended the seminar, is now engaged in preparing a document that will formalize that commitment, including details on how best to respond to the recommendations.

This procedure has been called "dream map guidance," because the map serves as a decision-making guide, while, at the same time, illustrating the dream of achieving environmental conservation. The challenge now will be to raise awareness about the benefits that conservation can provide for both people and nature, so that forest restoration efforts will be welcomed by as many people as possible. Local support is integral to conserve regions such as the Atlantic Forest, as well as the diverse animals and plants that inhabit biodiversity hotspots. This dream will surely make a difference in the conservation of this biodiversity hotspot.

Eduardo Ditt was awarded a Russell E. Train fellowship in 2004 to pursue a doctoral degree in environmental studies at Imperial College London. His thesis focused on integration of ecosystem services and policy to manage water and forest resources in the Atlantic Forest around the Atibainha Resevoir in Brazil.

Recent Conservation Workshop Grants

Since September 2006, EFN has funded 14 workshop and institutional grants, training more than 650 participants from local and indigenous communities, national and local governments, national parks, and nongovernmental organizations. Those trainings took place in 11 countries around the world. To find out more about workshop grants, please visit our Web site at www.worldwildlife.org/efn.

Akar Foundation, Indonesia—Conservation workshop to enable participation of indigenous people in developing a legal system for the management of natural resources with a basis in local wisdom in the sub-province of Lebong, Bengkulu Province.

Aliansi Masyarakat Adat Bengkulu, Indonesia—Stakeholder workshop to build an understanding of the jurisdiction relationship, challenges, and opportunities of customary law in an effort to solve forestry and natural resource disputes in the subprovince of Rejang Lebong.

Centre for Wildlife Management, Malawi—Sensitization, Awareness, and Training of Law Enforcers in Fighting Illegal and Unsustainable Trade in Endangered Wildlife Species in Zomba.

Earthwatch Institute–Belize Conservation Research Initiative, Belize—The Value of Social Science in Community Management of Belizean Ecosystems in Punta Gorda, Toledo.

Envirovet Summer Institute 2006, Multi–region—Institutional grant to fund Dr. Catia Dejuste de Paula from Brazil and Dr. Stephen Chege from Kenya to attend the Envirovet Summer Institute 2006 Training held in Florida, United States.

Fundación Senda Darwin, Chile—International workshop on designing and conducting field studies of biodiversity and covering the inquiry cycle as a learning, managing, and conservation tool to enhance the local environment in Chiloe.

Institute of Tropical Biology, Vietnam—Workshop to promote awareness of biodiversity conservation to the border guards in the Logo-Xamat National Park, Tayninh Province.

Kwetu Training Centre for Sustainable Development, Kenya—Silvofisheries Training Workshop.

Ngezi Nature Forest Reserve, Tanzania—Community Capacities on Roles, Rights, and Responsibilities on Management of Ngezi-Vumawimbi Nature Forest Reserve, in Pemba.

Nyae Nyae Development Foundation of Namibia, Namibia—Conservation Training for Community Rangers in Nyae Nyae Community in Tsumkwe.

Southern African Wildlife College, South Africa—Mozambique Field Ranger Training Course held in Limpopo, South Africa.

Universidad Austral de Chile, Chile—Advances in Remote Sensing: Image Processing for Monitoring and Ecosystem Assessment.

Watershed Task Group (WTG), Cameroon—Collaborative and Decentralized Management of Wetland Resources in the Douala Estuary and Lake Ossa: The Citizen Centered Approach.

WWF-Indonesia, Indonesia—Environmental education training for elementary school teachers in Katingan District, Central Kalimantan, Borneo.

Bakassi Team of the Watershed Task Group

Since 2005, through a generous grant from the Moore Foundation, EFN has supported 27 capacity-building workshops focused on training park guards in protected areas throughout the Andes and Amazon region, as defined by the Moore Foundation. The nine organizations listed were awarded this funding in December 2006 to train more than 200 park guards throughout the region. For more information, please visit www.worldwildlife.org/efn.

Asociación para la Conservación de la Cuenca Amazónica, Peru—Park guard capacity-building workshop on integrating the monitoring of the five big vertebrates in protected areas in southeastern Peru.

Asociación Peruana para la Conservación de la Naturaleza, Peru—Introduction to Biological Diversity through Digital Mapping, Satellite Images, and Enviormental Interpretation Techniques.

Centro de Biodiversidad y Genética, Bolivia— Workshop on Ecology, Conservation, and Biodiversity in Native Forests in Protected Areas of Cochabamba.

Centro Integrado de Defensa de la Ecología y del Desarrollo Rural, Bolivia—Capacity-building program for park guards in the management and sustainable use of natural resources.

Consorcio para el Desarrollo Sostenible de la Ecoregión Andina, Ecuador—Capacity-building course for park guards, community forest rangers, and indigenous promoters of five reserves in Colombia, Ecuador, and Peru.

Cordillera Azul (CIMA), Peru—Monitoring course for biological diversity for park guards in Cordillera Azul National Park.

Fundación para la Biodiversidad, Conservación y Desarrollo Sostenible, Bolivia—Capacity-building workshop for the implementation of monitoring systems for the management of Apolobamba Integrated Management Natural Area.

Sociedad Zoológica de Francfort (SZF), Peru—First Aid and Survival Training Course for park guards in Manu National Park and Tambopata National Reserve.

Participants of SZF Course

Wildlife Conservation Society, Ecuador—Training course for community park guards in Yasuni National Park.

Sharing Efforts and Making Connections: EFN Alumni Group, Mexican Chapter

Building from last year's EFN networking meeting of Russell E. Train fellows in Mexico City, the first formal meeting of the EFN Alumni Group, Mexican Chapter convened December 1–3, 2007, at the Institute of Ecology in Xalapa, Veracruz. Bringing together several EFN alumni from across the country, this reunion became a forum not only for sharing past research and projects, but also for discussing more recent experiences and achievements in conservation.

As María del Carmen Guzmán-Martinez shared, "This meeting allowed us to know and understand some of the conservation problems that our broad and diverse country is facing. Working together, we can think and propose solutions on conservation. One of the main goals is to create the society of professionals in conservation." This conference did just that, with unexpected connections made between the grantees and their work. A variety of topics and experiences were shared, such as Ernesto Gray's work in the Mesoamerican Reef system as part of his master's project, José Rogelio Cedeño's focus on the importance and status of protecting crocodiles in the Caribbean region, and Judith Cevallos's results from her work on local communities using exotic plant species in the Central region of Mexico.

"It was really pleasing to realize that every one of us is contributing at great lengths in diverse areas to protect the natural resources of Mexico," commented Enrique Nuñez Lara.

EFN Mexican Alumni Dulce María Infante Mata and Clara Elena Pérez Sánchez coordinated and organized this year's conference, with Jasmine Tillu representing EFN from WWF-U.S. in Washington, D.C. The year's conference continued to build on the mission of the group, and its success led to the planning of a second conference in fall 2007.

If you are an EFN grantee from or studying in Mexico and would like to become involved, please e-mail Dulce María Infante Mata at dulce.infante@posgrado.inecol.edu.mx or Clara Elena Pérez Sánchez at cperez@uabcs.mx.

Living on mangroves: A Look at the Ruvu Estuary Mangrove Forest, Tanzania

By Mwita M. Mangora (2000) Russell E. Train Fellow

Following the concept of the "Tragedy of the Commons,"[1] popular and scholarly belief states that unless natural resources are strictly in the domain of private or state property, their fate is an inevitable ruin. However, closer examination of the actions of poor communities that depend on natural resources for their daily livelihoods has brought forward a more positive view about human proclivity for caring and nurturing common resources found in nature. Many of those communities live among mangrove forests that contain important ecosystems in coastal areas of Tanzania. Mangroves produce goods and services that are of ecological and economic importance to coastal communities.

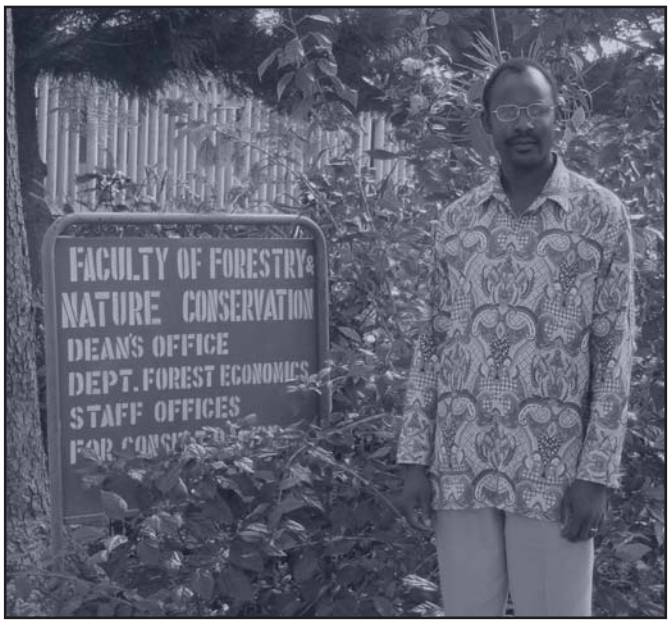
Records and observations, however, conclude that mangroves are under continual and increasing pressure from both natural and anthropogenic disturbances. Recently, concerns have arisen about the rise in sea level and the clearing of mangrove areas for fuel and lumber as well as the conversion of the land for other uses such as aquaculture, salt making, and agriculture. Although mangrove forests in Tanzania are legally set aside as forest reserves, the capacity to effectively enforce the law is still far from reach[2] and those ecosystems continue to be destroyed. Mangroves of the Ruvu River Estuary, north of Bagamoyo in Tanzania, have not been spared from these pressures. Recently, there has been massive clearance, particularly for firewood and charcoal making. Even the abandoned prawn farming ponds and salt pans are having difficulty regenerating naturally. Restoration initiatives are also stalled by the alarming pressures from desperate people who know no other way to make a living. The livelihoods of those people are attained at the expense of mangrove forests and fragile ecosystem.

The biggest challenge has been a failure to strike a balance between providing adequate livelihoods for the local people and protecting the mangroves from further degradation. The ideal solution would be to allow the coastal communities to obtain food, work, and income from the natural resources in the mangrove forests in a sustainable way. Unfortunately, that solution has been difficult to achieve because of a lack of education regarding conservation and insufficient means to enforce laws and to protect the resources. In the Ruvu Estuary mangrove forest, the impact of human consumption on the resources has begun to affect the forest and could lead to complete ecological degradation, as has been seen from other mangrove forests. Nevertheless, environmental degradation remains one of the greatest risks to current and future livelihood security for the local people, as well as the wildlife that depend on these forests. Conversion of mangrove forests to other uses and services is causing a loss of biodiversity and continued habitat fragmentation.

Factors that clearly exacerbate the destruction of mangrove forests and associated ecosystems in the Ruvu Estuary include increased demand for products and services because of rapidly growing human populations, sectoral approaches that maximize the benefits of one sector without taking into account implications for other sectors, and a lack of secured tenure or access rights that discourage individual and even community responsibility. Urgent management actions and policy interventions are needed to ensure sustainable use of the mangrove resources in Ruvu Estuary, as well as those in other places in Tanzania and along the entire East African coastal strip. Any effective management plan must recognize that productivity of coastal resources should not be enhanced at the expense of ecological integrity. Improving productivity while preserving ecological integrity will, therefore, require that local and national governments, nongovernmental organizations, local communities, and other stakeholders work together for the policies to be effective.

Policies must promote a paradigm shift from a single-sector approach to an integrated, or cross-sectoral, approach for the management of mangroves and other natural resources. Each of the stakeholders must commit to providing strong and sustained political leadership that supports integrated natural resource management from the local level to the national level. This political commitment should be translated into policies, budgetary allocations, and development assistance. Along with these policies, it is important to have good governance focused on a decentralized approach, with decision making on the allocation and management of natural resources dispersed throughout all levels of government.

Because one of the main challenges



Mwita Mangora

facing mangrove management is the unclear access rights of the land, it is important to undertake land reforms, including strengthening land-use planning, ownership, and access to resources. Such reforms will help to improve investments in environmental management and to create environmental assets, particularly for the poor. Local institutions, such as women's and youth's organizations, must be involved in this process. Their involvement will encourage community responsibility and create integrated approaches to natural resource management. This integration of the local communities can also involve developing microenterprises as a means to reduce pressure on natural resources and to create alternative employment, particularly among the youth.

Mangrove forests are of great importance to both the human and wildlife populations, and creating management plans that will help serve those populations is important. The Ruvu Estuary is an example of how human encroachment can lead to degradation, but action can be taken to reverse those effects. The methods mentioned can be used to save and conserve these important ecosystems.

1. Hardin, G. 1968. "The Tragedy of the Commons." *Science* 162:1243–48.

2. Semesi, A. K. 1992. "Developing Management Plans for the Mangrove Forest Reserves of Mainland Tanzania." *Hydrobiologia* 247:1–10.

Mwita M. Mangora received a Russell E. Train Fellowship in 2000 to attend Sokoine University in Tanzania to pursue a master's degree in natural resource management. His thesis focused on the impact assessment of forest resource utilization on biodiversity in the miombo woodlands in Tabora District, Tanzania. He is currently an assistant research fellow for the Institute of Marine Sciences at the University of Dar Es Salaam in Tanzania.

Philippine Talking Myna: A Bioindicador at Mt. Mantalingahan, Palawan, Philippines

By Ramon M. Docto (2001) Russell E. Train Fellow

The Philippine talking myna (Gracula religiosa palawanensis) is a mostly black bird that is native to Palawan Island in the Philippines. It is approximately 12–13 inches long and is slightly larger in size and build compared to its close relative, the Philippine glossy starling (Aplonis panayensis panayensis). Because of its ability to mimic sounds in captivity, it is one of the most popular and marketable birds in the Philippines, especially in the Palawan Faunal Region, where it has been recorded on the islands of Balabac, Busuanga, and Culion. The talking myna typically inhabits primary forests, although it may also be found in generating tracts and logged-over areas.

A recent research project used the talking myna as a bioindicator to assess the environmental health and to monitor the wildlife of the Mt. Mantalingahan area. The study site of approximately 1,200 hectares of forested area on the western side of the Mt. Mantalingahan range was selected because of its potential as a habitat for wildlife and the future location of a wildlife conservation and research center. Field observations of the species and descriptive surveys were use to collect and analyze primary and secondary data using quantitative and qualitative measures. The primary problem besetting the richness of the area's biological diversity is habitat alteration characterized by the change from a highly diverse to a less diverse agro-ecosystem. The destruction of habitat in the Mt. Mantalingahan area has led to a notable decrease in the population of talking myna birds. The increase in the human population in that area and the conversion of land for agricultural use have been major factors contributing to the decline in the bird's population.

Because of this research, people living in the mountain range have recognized the need to create appropriate environmental regulations regarding Mt. Mantalingahan and for the local government to strictly enforce those policies. There has been a lack of government support in natural resource conservation programs implemented in the area. In the past, programs have been ineffective in protecting forest resources and the interests of the local people. Now that there is greater support for the conservation of Mt. Mantalingahan, the prospects for the talking myna should improve.

Ramon M. Docto received a Russell E. Train Fellowship in 2001 to attend the University of the Philippines and to pursue a doctoral degree in environmental science. His thesis focused on human–nature interactions in relation to the protection and conservation of Mt. Mantalingahan in Southern Palawan, Philippines. He is currently a research director at Palawan State University.

Hartlaub's gull
(c) WWF-Canon / Martin HARVEY

EFN Professional Development Grants

EFN awarded 18 mid-career professionals short-term training grants to attend workshops, conferences, and training programs in 10 countries around the world. The grants were used to study several conservation issues and techniques, such as wildlife management, geographic information systems (GIS) training, biology conservation, community participation, and forestry. For more information, please visit the EFN website at www.worldwildlife.org/efn.

BRAZIL

Andrea Cantanhede—*Amazonian Manatee Specialist, National Research Institute of Amazonia–Aquatic Mammals Laboratory*. VII Latin American Biology Course on Conservation and Management of Wildlife, Instituto de Pesquisas Ecológicas, Brazil

Bruno Spacek Godoy—*Entomologist Postgraduate Student, National Research Institute of Amazonia*. VII Latin American Biology Course on Conservation and Management of Wildlife, Instituto de Pesquisas Ecológicas, Brazil.

COLOMBIA

Adriana Mercedes Sarmiento Duenas—*Master's Degree Student, Instituto de Pesquisas Ecológicas*. VII Latin American Biology Course on Conservation and Management of Wildlife, Instituto de Pesquisas Ecológicas, Brazil.

LAOS

Souvanny Ounmany—*Project Manager, WCS-Laos Program*. Third Eld's Deer Interest Group Conference, Smithsonian Institution, Cambodia.

MADAGASCAR

Fleuria Monique Randriatsivery—*Ecologist and Consultant, Missouri Botanical Garden*. Ecovillage Training Course, Findhorn Foundation, United Kingdom.

MALAWI

Hastings Kawerengah—*Assistant Parks and Wildlife Officer, Department of National Parks and Wildlife*. GIS Training Course, Southern African Wildlife College, South Africa.

Paston Patan Simkoko—*Research Assistant, Nyika National Park*. GIS Training Course, Southern African Wildlife College, South Africa.

Miles Vested Zidana—*Assistant Parks and Wildlife Officer, Department of National Parks and Wildlife*. GIS Training Course, Southern African Wildlife College, South Africa.

MEXICO

Claudia Rodriguez-Ibañez—*Master's Degree Student in Marine Ecology,* Centro de Investigación Científica y de Educación Superior de Ensenada. First Symposium for the Biology and Conservation of Manatees in Mesoamerica, Mesoamerican Society for Biology and Conservation, Guatemala.

MOZAMBIQUE

Saina Francisco Goveia—*Volunteer, Tchuma Tato Programme*. GIS Training Course, Southern African Wildlife College, South Africa.

NEPAL

Krishna Prasad Acharya—*Research Officer, Department of Forest Research and Survey*. Earth System Science Partnership Open Science Conference, China Meteorological Administration, China.

Hemanta Kafley—*Park Ranger, Shey Phoksundo National Park, Department of National Parks and Wildlife Conservation*. Remote Sensing and GIS Course (with a specialization in forestry and ecology), Indian Institute of Remote Sensing, India.

Prakash Kumar Rai—*Assistant Lecturer, Tri Chandra Multiple College*. Course on Landscape Functions and People: Applying Strategic Planning Approaches to Good Natural Resource Governance, Regional Community Forestry Training Centre for Asia and the Pacific, Thailand.

PERU

Jorge Octavio Elgegren Apuela—*Independent Consultant for Environmental Policy*. Ninth Biennial Conference of the International Society for Ecological Engineers, International Society for Ecological Economists, India.

TANZANIA

Festo John Banzi—*Community-Based Conservation Facilitator, Pande Game Reserve*. Short Course on Community Conservation—People and Conservation, College of African Wildlife Management, Tanzania.

Abraham Salustian Jullu—*Game Warden, Ministry of Natural Resources and Tourism, Selous Game Reserve*. GIS and Conservation Training Course, College of African Wildlife Management, Tanzania.

Zawadi Hemedi Mahinda—*Park Assistant, Community Conservation Service, Saadani National Park*. Certificate Course in Wildlife Management, College of African Wildlife Management, Tanzania.

Frank Alexander Mawi—*Assistant Lecturer, College of African Wildlife Management–Mweka*. Training Course on Land Use, Land Degradation Assessment, and Monitoring Using Remote Sensing training course, Regional Centre for Mapping of Resources for Development, Kenya.

Red-eyed treefrog

EFN Grantees Win Alcoa Practitioner Fellowships

In late 2005, Alcoa Foundation launched its $8.6 million Conservation and Sustainability Fellowship Program to advance the knowledge and support of exemplary work in the field of conservation and sustainability. Out of 26 practitioner fellows chosen in this highly competitive program, 5 of them were EFN alumni (see below). Under the program, the five fellows are working with mentors from WWF and the IUCN World Conservation Union to conduct research in their home countries.

Wang Kanglin received a Russell E. Train Fellowship in 1997 to attend the University of the Philippines at Los Baños and to pursue a doctoral degree in forest biological sciences. He is currently an associate professor at Kunming Institute of Botany at the Chinese Academy of Sciences. As a practitioner fellow, he is conducting research on the effect of Chinese cardomon management on the livelihoods of indigenous people around the Jinping National Nature in Yunnan Province.

Mwape Sichilongo received a Russell E. Train Fellowship in 2002 to pursue a master's degree in conservation biology at the University of Kent in the United Kingdom. He is currently the adviser for the Community-Based Natural Resource Management Project (CBNRM) at Development Services and Initiatives, and he serves on the Operations and Technical Committee of the Zambia Wildlife Authority. His fellowship research looks at institution building and economic microprojects for promoting sustainability in CBNRM.

Shakil Visram received a Russell E. Train Fellowship in 2001 to pursue a doctoral degree in biology at the University of York in the United Kingdom. He is currently working as a research associate for the Coral Reef Degradation in the Indian Ocean East Africa Program in Kenya. His fellowship research investigates the influence of marine protection and coral reef habitat on bleaching resilience, the capacity to recover from coral bleaching.

Rodrigo Hucke-Gaete's organization, Centro Ballena Azul, received an EFN Conservation Workshop Grant in 2005 to conduct a workshop on the basic concepts and applications of marine and terrestrial conservation biology in the Valdivian Ecoregion in Chile. He is currently serving as the director of Centro Ballena Azul and lecturing at the Universidad Austral de Chile. His research sponsored by Alcoa Foundation will help establish a protected area for blue whales in southern Chile.

Yang Lixin received a Russell E. Train Fellowship in 2003 to attend the University of the Philippines at Los Baños to pursue a master's degree in social forestry. She is currently working as an assistant professor at Kunming Institute of Botany at the Chinese Academy of Sciences. With her Alcoa Foundation fellowship, she is conducting research on the links between indigenous knowledge on papermaking and livelihoods of the Naxi people in northwest Yunnan Province.

Alcoa Foundation Practitioner Fellowship

WWF is pleased to participate in Alcoa Foundation's Conservation and Sustainability Fellowship Program. To date, five EFN grantees have competed for and won practitioner fellowships. WWF encourages you to explore this potential source of funding for your research.

About the Program

Alcoa Foundation's Conservation and Sustainability Fellowship Program is a unique international program created to advance the knowledge and support for exemplary work in the field of conservation and sustainability through fellowships to outstanding academics and practitioners from nongovernmental organizations (NGOs). By bringing together the academic, NGO, and business communities, the program will be a new model of effective private philanthropic action to address urgent problems of global concern.

About the Fellowship

Practitioner fellowships provide a nondegree opportunity for qualified mid-level professionals from NGOs (and, in some cases, the government) to conduct approved 6- to 12-month intensive applied research projects in conservation and sustainability. Fellows work from their home organization and are mentored remotely by an expert from a selected sustainability institute. Fellows receive a $10,000 grant and reimbursement for travel to an orientation and a program conference.

Eligibility

To be eligible for a practitioner fellowship, you must be a mid-career professional employed by an NGO, a similar organization, or a governmental organization that permits this type of award. Full-time students and consultants are not eligible. Full-time employees of an academic institution, such as a professor or researcher, who are conducting research of an academic nature are not eligible.

The deadline for applications is May 31, 2007. Visit www.alcoafoundationfellows.org for more information.

Notes from the Field

Pham Huu Tri, Vietnam (2005), EFN Professional Development Grant

In 2005, Pham Huu Tri received a grant to attend a conference hosted by DIVERSITAS in Mexico that focused on integrating biodiversity science for human well-being. In December 2006, he received a grant from the Rufford Maurice Laing Foundation to conduct research on the rehabilitation and conservation of the seagrass meadows at Cam Hai Dong, Cam Ranh Bay, Khanh Hoa Province, Vietnam.

Pham Huu Tri

Ken Serey Rotha, Cambodia (2000), Russell E. Train Fellowship

While working with WWF-Cambodia, Ken Serey Rotha received a master's degree in environmental management and development from Australian National University. After his graduation in 2004, he became the executive director of the Community-Based Natural Resource Management Learning Institute, a newly established local nongovernmental organization that works closely with WWF-Cambodia. The institute's goal is to empower local communities to participate actively in the conservation and sustainable management of natural resources.

Hugo Enrique Cañiza, Paraguay (2003), Russell E. Train Fellowship

In 2003, Enrique Cañiza received funding from EFN to pursue a master's degree in environmental law from Universidad Paulo Freire in Nicaragua. He completed his fellowship in 2004. In January 2007, he became the new director for the environment for the Municipality of Asunción in Paraguay.

Julius Fanuel, Tanzania (1999), Russell E. Train Fellowship

Julius Fanuel completed his master's degree in natural resource management at the University of Sokoine Morogoro in Tanzania. He then became the department head and team leader for creating environmental education in Tanzania, as well as the head of the Livestock Production Unit for the Soil Conservation and Agroforestry Programme in Arusha. In 2003, he received an alumni grant to attend the short course "Participatory Natural Resources Planning and Governance" at MS Training Centre for Development Cooperation in Arusha. He is currently working as a program manager for World Vision Tanzania (WVT), coordinating the development of programs and strategies to conserve natural resources and environment in WVT areas.

Nadia Bood, Belize (2005), Russell E. Train Fellowship

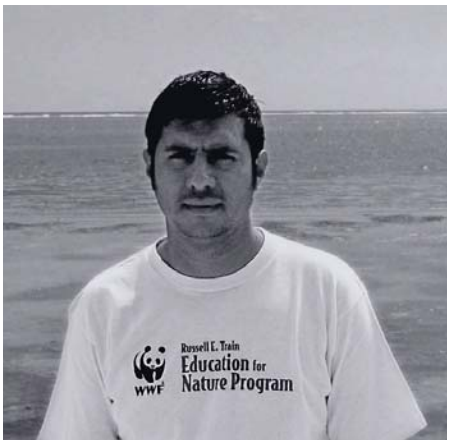
Nadia Bood received a fellowship from EFN to pursue a master's degree in marine biology at the University of Alabama in the United States. Her thesis research focused on the recovery and resiliance of coral assemblages on managed and unmanaged reefs in the Belizean Barrier Reef, specifically in the Bacalar Chico Marine Reserve, Hol Chan Marine Reserve, and Glovers Reef Reserve. She is currently working as a Mesoamerican Reef scientist for WWF-Central America Regional Office and is responsible for guiding and overseeing the implementation of the Mesoamerican Reef marine science and research program. The program focuses on coral reef conservation, marine ecology, adaptation to climate change, and other related research issues to support WWF conservation efforts in the priority ecoregion.

Fabián Rodríguez Zaragoza, Mexico (2004), Russell E. Train Fellowship

In 2004, Fabian Rodríguez Zaragoza was awarded a fellowship to fund part of his doctoral research at Centro de Investigación de Estudios Avanzados del Instituto Politécnico Nacional in marine science. He currently works with WWF-Mexico as an ecology monitoring officer for the fisheries project in the Mesoamerican Reef. Along with his colleagues, he is helping to apply methods of fisheries management in the region to protect the health and condition of the coral reef systems.

Fernando Silva Lima, Brazil (2005), EFN Professional Development Grant

Fernando Silva Lima, who is currently



Fabián Rodríguez Zaragoza

working with Instituto de Pesquisas Ecológicas in Brazil, received a short-term grant in 2005 to attend a diploma course at Durrell Wildlife Preservation Trust in the United Kingdom, focusing on endangered species management. This year, he received a grant from the Oregon Zoo Foundation Future for Wildlife Conservation Fund to help fund his project, "The Leap of the Cat: Conservation of the Ocelot in Pontal do Paranapanema Region," with research and experience during his postgraduate diploma.

Pablo Granados-Dieseldorff, Guatemala (2003), Russell E. Train Fellowship

In 2003, Pablo Granados-Dieseldorff received a fellowship to attend Louisiana State University to purse a master's degree in biological oceanography with a focus on estuarine fish ecology. He was recently awarded a Sea Grant Fellowship from the National Oceanic

and Atmospheric Administration and was selected for the Knauss Marine Policy Fellowship, working with the National Science Foundation's Division of Ocean Sciences, Biological Oceanography Program. He is working on marine mammal conservation issues that are related with whale and dolphin ecology, and he plans to work with coral reef ecosystems, focusing on the American Samoa and Caribbean regions.

Anjala Pyakurel, Nepal (2000), Russell E. Train Scholarship

Anjala Pyakurel was awarded a scholarship to attend the Institute of Forestry in Nepal to pursue a bachelor's degree in forestry. After completing her degree in 2003, she began working with Himalayan Grassroots Women's Natural Resource Management Association as a program officer and prepared the 2005-2009 Hindukush Regional Level Strategic Plan for the organization. In 2006, she received a scholarship from the Ministry of the Environment, State of Baden Wuttenberg, Germany to complete her master's degree in forest ecology and management at Albert-Ludwigs University of Freiburg and plans to complete her studies in 2008.

Anjala Pyakurel

Den Selection of the Giant Panda in Foping Nature Reserve, China

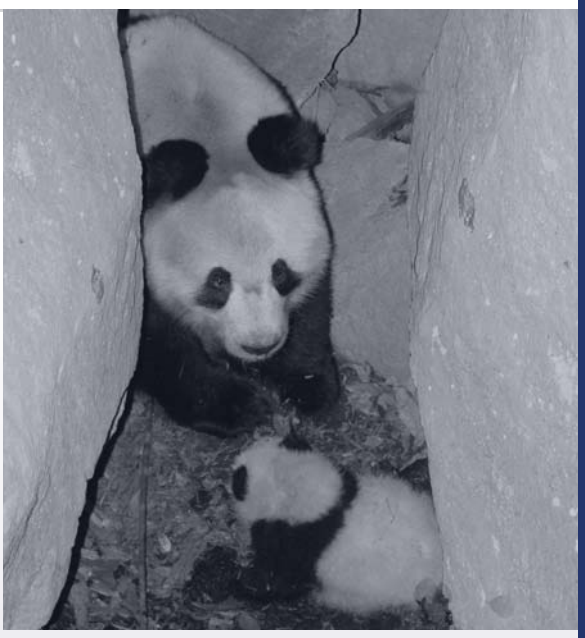
(continued from page 1)

Canopy and bamboo cover was denser near natal dens and they were much closer to a permanent water source.

All aspects of the two types of sites differ drastically, making it clear that giant pandas choose their natal dens carefully and with specific characteristics in mind. The dens were mainly located far from human disturbance. The results indicated that canopy cover was the most important factor in the natal den selection. Distance to water, coverage of bamboo, and ability to keep out rain were also important factors that determined the den selection by the giant pandas in Foping Nature Reserve.

As a specific habitat of wildlife, natal dens are important to the persistence of giant panda populations because they provide shelter from extreme temperature, moist microclimate, and predation pressure and because they are suitable places to rear young. Because of the high density of giant pandas in the reserve, the shortage of natural dens may limit the growth of wild populations. As a K-strategy species, giant pandas maintain their numbers in stable ecosystems and tend to stabilize their population in accordance with the carrying capacity of their surroundings. With an ever-shrinking habitat, giant pandas struggle to find suitable places to breed and rear their young. Further research will focus on reshaping the existing limestone caves or setting up artificial dens in appropriate places to substitute for natural dens in areas where the habitat is suitable but where natural dens are insufficient.

The giant panda is universally loved and, of course, has a special significance for WWF as it has been the organization's symbol since the organization was formed in 1961. Today, the giant panda's future remains uncertain. This peaceful, bamboo-eating member of the bear family faces a number of threats. Its forest habitat, in the mountainous areas of southwest China, is fragmented and giant panda populations are small and isolated from each other. Meanwhile, poaching remains an ever-present threat. The survival of the panda and the protection of its habitat will ensure that people living in the region continue to reap ecosystem benefits for many generations.



Giant panda with cub in natal den

Xinping Ye received a Russell E. Train Fellowship in 2003 to pursue a master's degree in zoology at Beijing Normal University. His thesis focused on the study of natal dens of the giant panda and the monitoring of the giant panda's population in Foping Natural Reserve, China. He is currently the director of the Scientific Research Department at the reserve.

2007 International Conferences

27th Annual Conference of International Association for Impact Assessment 2007—Growth, Conservation, and Responsibility: Promoting Good Governance and Corporate Stewardship through Impact Assessment

*Seoul, South Korea * 2–9 June 2007*
www.iaia.org/Non_Members/Conference/conference.htm

This conference focuses on growth, conservation, and responsibility, and it will discuss and attempt to find a solution to the problem of how we reconcile economic growth with conserving the environment. The conference will be a gathering of experts and will include numerous discussions on traditional core topics regarding to conservation with a specific look at Asia.

World Environmental Education Congress: Learning in a Changing World

*Durban, South Africa * 2–7 July 2007*
www.weec2007.com/

The congress opens the opportunity for critical reflection on the role of education—practice and theory—in effecting international goals of addressing social, economic, and environmental concerns. The World Environmental Education Congress Secretariat aims to launch the World Environmental Education Association during the congress. The program includes daily keynote speakers, presentations of research-based papers, poster presentations, workshops, and roundtables, as well as social marketing of programs in a marketplace and several exciting cultural events and scientific tours.

Soil and Water Conservation Society 2007 Conference: Conservation Challenges in a Changing Landscape

Tampa, Florida * 21–25 July 2007
www.swcs.org/en/swcs_conferences/

The conference includes workshops, concurrent sessions, symposia, posters, plenary sessions, and technical tours designed to expose participants to recent developments in the science and art of natural resource conservation and environmental management on working land, the largely privately owned land comprising working farms, ranches, forests, and rural and urban communities.

Third International Conference on Climate and Water

*Helsinki, Finland * 3–6 September 2007*
www.environment.fi/syke/cw3

The objective of this conference is to provide an opportunity for hydrologists, water managers, and decision makers to exchange research results, ideas and concerns about impacts of climate change in the water sector and ways to adapt to and mitigate such impacts. Topics for the conference include climate change and hydrological extremes, climate change and water resources, risk and risk management, adaptation to the impacts of climate change in the water sector, climate change mitigation and hydrology, hydrological science, poverty, and capacity building.

ECOSUD 2007—Sixth International Conference on Ecosystems and Sustainable Development

*Coimbra, Portugal * 5–7 September 2007*
www.wessex.ac.uk/conferences/2007/eco07/index.html

This conference is the sixth in the well-established series on ecosystems and sustainable development. The meetings provide a unique forum for the presenting and discussing recent work on different aspects of ecosystems and sustainable development, including physical sciences and modeling. The conference intends to encourage and facilitate the interdisciplinary communication between scientists, engineers, and professionals working in those areas that will most benefit from the application of scientific methods for sustainable development and the conservation of natural systems around the world.

10th International Biennial Conference on Environmental Science and Technology

*Cos Island, Greece * 5–7 September 2007*
www.gnest.org/cest

This conference maintains and upgrades the synthetic and integrated approach toward protecting and restoring the environment by bringing together engineers, scientists, students, managers, and other professionals from different countries involved in various aspects of environmental science and technology. Several workshops and seminars will be available, and the topics will include environmental restoration and ecological engineering, water resources and river basin management, and global environmental change and ecosystems management.

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