

**Prestigious Goldman Prize goes to gorilla programme co-ordinator**

Eugène Rutagarama, a Rwandan conservationist who risked his life to save Rwanda's last 320 mountain gorillas, is one of eight environmental heroes from around the globe to be honoured with the Goldman Environmental Prize for 2001. This prestigious prize, now in its 12th year, was presented at an award ceremony in San Francisco on 23 April 2001. Eugène was forced to flee Rwanda during the massacres of the 1990s, during which most of his family was killed. He returned to rebuild the national park system and protect gorilla habitat from human encroachment as the government resettled millions of refugees. While his country was in chaos, he risked his life to save the silent victims of this genocidal war.

Eugène has worked for the International Gorilla Conservation Programme (IGCP) since 1997 and is the Programme Coordinator. There are fewer than 650 mountain gorillas left in the world, and IGCP's overall goal is to ensure the survival of the mountain gorillas and their shrinking Afro-montane forest habitat. Two isolated populations remain, one in the Bwindi Impenetrable National Park, south-west Uganda (see McNeillage, A. *et al.*, 2001, *Oryx* 35(1), 39–47), and the other on the forested slopes of the Virunga volcanoes straddling the borders of the Democratic Republic of Congo, Rwanda and Uganda. The IGCP is a joint initiative between Fauna and Flora International (<http://www.fauna-flora.org>), the African Wildlife Foundation (<http://www.awf.org>) and the World Wide Fund for Nature (<http://www.wwf.org>), and the protected area authorities of the three countries.

The Goldman Environmental Prize, given in six geographical categories, includes a prize of US \$125,000 from the Goldman Environmental Foundation, established in 1989 by civic leaders Richard N. Goldman and his late wife Rhoda H. Goldman. A total of US \$750,000 is given annually to grassroots heroes from around the world. Nearly 70 previous Goldman Environmental Prize winners have successfully defended the safety and health of their homelands from destructive government projects and practices, multinational corporations, corrupt leaders, international financial institutions, and even the destruction brought by wars. The Prize allows many to continue their work and expand public awareness of what are often life-and-death environmental crises.

Goldman Environmental Prize winners are selected by an international jury from confidential nominations submitted by a worldwide network of over 20 environmental organizations and individuals representing nearly 50 nations. The Prize is the world's largest award for environmental activists. In addition to the cash award, recipients participate in a 10-day tour to San Francisco and Washington, DC for an awards ceremony and presentation, press conferences, media briefings, and meetings with political, public policy, financial and environmental leaders.

Further information on the other seven prize winners of 2001, and on the Goldman Environmental Prize and previous winners, can be found at <http://www.goldmanprize.org>

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**Biodiversity conservation management project underway in Romania**

A major Global Environment Facility/World Bank project, implemented by the Government of Romania, is establishing a stronger base for conservation management across Romania – with a focus on improving the protected areas system.

In Romania such a project is both important and timely – particularly given the pressure on government to reconstitute large tracts of the country's forests to their original owners. Although Romania's forests are currently among the best-managed in Europe – and support significant biodiversity, including many large carnivores – economic imperatives mean that current forest management practices are unlikely to be closely followed after restitution, leading to a real risk of forest clearance in some areas. In this context there is an increasingly urgent need to ensure that adequate lands have been put aside for conservation, and that they continue to be managed appropriately and with effective community engagement. In the past in Romania there were few opportunities to directly engage local communities in the planning and operation of protected areas, or to ensure that they received benefits from the existence of such parks.

Within the Biodiversity Conservation Management Project a comprehensive package has been proposed to assist the Ministry of Waters and Environmental Protection (specifically the Directorate for Nature and Biodiversity Conservation) and the National Forest

Administration to plan and manage nationally for biodiversity conservation. In particular, the project aims to strengthen legislation for protected areas, develop models of participatory planning for park management, and to identify gaps in the current protected areas system. The project will also improve the management of biodiversity information across the country, and will eventually put in place a national system of monitoring for biodiversity management. The eventual aim is to incorporate biodiversity into all forest management planning procedures. All these efforts will be supported by a national public awareness programme.

On the ground the project focuses on a series of three sites in the Carpathian Mountains – a National Park (Retezat), a Natural Park (Piatra Craiului) and a Forest Park (Vanatori Neamt) – that will provide models for protected area management practices across the country.

Under the project a new Park Management Authority has been established for each of these sites. Within the project the parks are focusing on obtaining and organizing the necessary data to support and monitor park management (including geographical, social and biological data), developing park management plans, developing community outreach programmes (including investigation of local income generation opportunities, such as ecotourism), training of park staff, and the development of park infrastructure. Over the coming years the three sites will also identify potential opportunities for the parks to contribute to their own financial sustainability.

Within the first 18 months of this 5-year project significant progress has already been achieved:

- A comprehensive biological survey for each of the three parks is providing baseline data to assist decision-making in the management planning process.
- Data storage and organization are underway at each park, using Geographical Information Systems.
- All three parks now have draft management plans that are due to undergo a process of national review – and eventually adoption by the government – later this year.
- The park staff have been working directly with local communities to engage them in park management through Consultative Committees. Communities participated directly in the development of the draft management plans earlier this year – the first time this has happened in Romania.
- A review has been initiated to identify opportunities for economic development linked to the parks, with an initial focus on the potential of tourism development.
- Small grants programmes are under development at each park – with the involvement of the local

community – and will be operational by the end of 2001.

- At a national level, the project has led the review and revision of legislation to support protected areas in Romania.
- Procedures have been identified to strengthen national systems for managing biodiversity information, and eventually to identify the gaps in the current network of parks.
- Training and capacity building programmes are underway at both national and park level.

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### **Snow leopard conservation: a NABU project in Kyrgyzstan**

Since 1999, NABU, the German Society for Nature Conservation, has been organizing the conservation of snow leopards *Uncia uncia* in Kyrgyzstan in an international project in cooperation with the Kyrgyz Ministry of the Environment, Emergencies and Civil Defence and the Kyrgyz Ministry of the Interior. The animal, with its typical grey-beige patterned fur and bushy tail, is one of the most endangered big cats in the world. It is categorized as Endangered on the 2000 IUCN Red List and is on CITES Appendix I.

Approximately 4500–7500 snow leopards survive in the wilderness of Central Asia's mountains and the Himalayas. Until recently Kyrgyzstan was the home of one of the largest populations, but since the early 1990s numbers have fallen to an estimated 260–700 animals. This dramatic decline is mainly because of an increase in poaching.

The threat to the snow leopard is a result of a tremendous demand for furs, with 6–11 snow leopard skins needed to create one coat. Snow leopard bones are also being increasingly used in traditional Chinese medicine as a substitute for tiger bones. In cooperation with the Kyrgyz Government and local experts, NABU has developed a project that aims to contain the illegal hunting of snow leopards. At the centre of this project is the Snow Leopard Conservation Task Force 'Gruppa Bars'. In the 2½ years since the beginning of the cooperation between NABU and the Ministry of the Environment more than 120 poachers and traders have been arrested and more than 700 furs, and 400 weapons and traps have been confiscated. Unfortunately a member of this anti-poaching team was recently injured during an attempt

to arrest a group of traders who wanted to sell a young snow leopard.

Further information on the NABU project in Kyrgyzstan may be obtained from Birga Dexel, NABU Snow Leopard Conservation Project Co-ordinator, Naturschutzbund Deutschland e.V. – NABU, Invalidenstr. 112, D – 10115 Berlin, Germany. Tel.: +49 30 2849840; E-mail: schneeleo@nabu.de; Web: <http://www.snow-leopard.de>

### Wasting the woods

The very high waste levels involved at all stages of timber use have a significant impact on forest and tree conservation, yet the issue has received relatively little attention to date. As part of the Global Trees Campaign, Fauna and Flora International (FFI) has produced a report examining the sources and disposal of wood waste in the UK, and the potential for greater waste reduction, re-use and recycling. For example, approximately 300 tonnes of reusable tropical hardwood are thrown away in the UK every working day from the demolition of old buildings alone, and up to 50 per cent of sawn timber is wasted in the manufacture of furniture and joinery. The report finds some encouraging signs that re-use of surplus and waste timber is increasing, driven by government policies to reduce landfill, but far more needs to be done. With funding from Fenside Waste Management, FFI is now working to raise awareness of the issue, and is acting as an information resource for anyone interested in tackling wood waste. Other work includes a revised consumer guide to buying timber that emphasizes reclaimed sources, to be published jointly with Friends of the Earth early next year. For a copy of FFI's report *An Introduction to Wood Waste in the UK*, e-mail: [woodwaste@fauna-flora.org](mailto:woodwaste@fauna-flora.org)

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### Unparalleled species richness found on the coral reefs of Raja Ampat Islands

The latest expedition of the Marine Biodiversity Program of Conservation International (CI) found unparalleled species richness in corals, fishes and molluscs on the previously unsurveyed reefs of the Raja Ampat Islands, west of Irian Jaya, in Indonesia. The survey took place during the 3-week Rapid Assessment Program (RAP) expedition in March and April of this year. The

team included 10 Indonesian and international marine scientists, who inventoried the fauna of the islands' reefs, assessed their condition and conservation status, and researched the use of marine resources by the nearly 8000 people living in the 22 small communities around the islands.

Conservation International's Dr Gerald Allen registered 950 coral reef fish species and broke the world record for the number seen in a 1-h dive, 283. The total number of fish species is predicted to exceed 1100, including four new species. Damselfishes, one of the most abundant inhabitants of coral reefs, totalled more than 108, nearly as many as those recorded for all of the reefs surrounding the entire continent of Australia. More than half the world's total coral species, 450, with at least seven new to science, were recorded by team member Dr J.E.N. Veron of the Australian Institute of Marine Science (AIMS). Nearly 700 molluscs were recorded by Dr Fred Wells of the Western Australian Museum; the highest number recorded for any Marine RAP.

Jabz Amarumollo and Mohammed Farid, Indonesian scientists working with CI, found that the local communities are dependent on the maintenance of the health and biodiversity of these reefs. More than 90 per cent of the adult population is engaged in subsistence-level fishing, and while commercial exploitation is minimal, some communities are using damaging cyanide-containing chemicals. The amazingly rich marine biodiversity of the Raja Ampat coral reefs is threatened by illegal fishing methods (e.g. dynamite and cyanide fishing) and other human activities such as deforestation. The results of the assessment point to the need for management guidelines to be drafted in conjunction with national and local government and village leaders to ensure the long-term survival of their precious natural heritage.

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### Community-based protection successful for the Pemba flying fox

Concerns about the status of the Pemba flying fox *Pteropus voeltzkowi* were initially raised by a report in *Oryx* (Seehausen, O., 1991, The Pemba fruit bat – on the edge of extinction? *Oryx* 25, 110–112), and the species was consequently listed as Critically Endangered. Subsequently *Old World Fruit Bats, An Action Plan for their Conservation* (Mickleburgh, S.P. et al., 1992, IUCN,

Gland, Switzerland) laid out recommendations for the conservation of this species. This stimulated two survey and conservation education projects during the 1990s that worked directly with the local conservation agency (O. Seehausen, unpublished; Entwistle, A.C. & Corp, N., 1997, The status and distribution of the Pemba flying fox, *Pteropus voeltzkowi*, *Oryx* 31, 135–142).

These surveys established that although the population was greater than previously thought (3000–5000 individuals), ongoing threats to this species included loss of habitats (forest clearance and degradation), felling of roost trees, roost disturbance and direct hunting. The flying fox is considered a traditional delicacy in Pemba, Tanzania, and in previous years hunting parties caused increased bat mortality and effective roost abandonment. Surveys demonstrated that flying fox roosts were associated with a range of primary and secondary habitat types, particularly with relict pieces of forest in traditional graveyards.

Since 1997 the project has been conducted by the Department of Commercial Crops, Fruit and Forestry on Pemba, with support from the Lubee Foundation and Fauna and Flora International. Over the last 4 years the project has focused on further increasing public awareness of the threats faced by the flying foxes, and on the opportunities to protect this symbol of the island's uniqueness. Outreach officers have targeted communities close to bat roosts, through village meetings and schools (since children previously proved an effective means of accessing the broader community on Pemba). In addition, seminars have been held to discuss the issues with community leaders and representatives from administrative centres. A specially produced video on the flying fox conservation project has been an invaluable aid in engaging these audiences.

One of the greatest achievements of the project so far has been the establishment of community-based environmental clubs at a number of villages. The project has also provided grants for activities that benefit the environment of the whole village. Environmental clubs now take responsibility for the protection of bats in graveyards neighbouring their villages – in some cases villages have even enacted local bylaws to protect the bats and their roosts, with enforcement by the club members. There are now indications that larger flying fox colonies are associated with these protected sites, suggesting that colony size is increasing within the roosts with community protection. In the next months, environmental clubs will be taking a stronger role in monitoring the bats at their roost sites.

In addition to working with the community, the Forestry Department has also undertaken a series of roost visits to determine changes in bat population sizes.

A survey of 43 roost sites earlier this year revealed a total population estimate of over 6900 flying foxes – the highest count recorded in recent surveys.

The lack of further decline in the population of this species, along with the numbers of bats now actively protected by conservation clubs, appears to validate a community-based approach to the conservation of this species. However, ongoing commitment to the project is required to ensure that this situation is maintained, and that local communities can continue to value the flying foxes and to appreciate the need for their protection.

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### ConserveOnline, a new online resource for conservation

The Nature Conservancy, the Society for Conservation Biology, the American Museum of Natural History, and the Association for Biodiversity Information have created an online resource for conservation. The website, called ConserveOnline (<http://www.conserveonline.org>), is a free, public library of conservation science and practice. ConserveOnline provides conservation practitioners with the comprehensive, current, relevant and trustworthy information they need to conserve species, habitats and ecosystems.

ConserveOnline has four key audiences:

- Conservation practitioners around the world require dedication, innovation, and solutions to succeed in their site-based challenges. In many projects and for many conservation practitioners, access to information about new techniques, tools or approaches might make the difference in their ability to succeed. Yet, these practitioners are often isolated, and have limited resources to turn to for aid.
- Academic conservation biologists are increasingly concerned with testing cutting edge ideas in the field, thus linking theory and practice.
- Community leaders and local government officials seek information that will help them balance growth with nature preservation. They may seek information about transferring development rights, managing river flows for biodiversity, or creating sustainable economic institutions, but they may have few ideas of where to go to obtain such information.
- Concerned citizens often seek in-depth information about conservation practices, approaches and tools.

Resource types on ConserveOnline include publications, unpublished documents, case studies, presentations,

practices and methods, standards and guidelines, laws and policies, tools and software, data sets and statistics, ecoregional plans, site conservation plans, maps, and graphics and images. Users of the site can register for free, and can then add their own documents to the library.

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### The World Bank and biodiversity conservation

It is not widely realized that the World Bank is the largest financier of conservation projects. Here, we outline the Bank's portfolio of projects and, in forthcoming issues of *Oryx*, we will highlight the different areas of assistance provided by the Bank and the issues that have to be faced.

The mission of the World Bank is 'to fight poverty with passion and professionalism for lasting results, and to help people help themselves and their environment by providing resources, sharing knowledge, building capacity, and forging partnerships in the public and private sectors'. Thus, the Bank assists its clients and partners in conservation efforts as a recognition that ecological benefits and services are the foundation of societies and economies, and provide local livelihoods. World Bank support to conservation has covered the establishment and strengthening of protected areas (including activities in buffer zones), sustainable use of biodiversity outside protected areas, eradication of alien species, and biodiversity conservation through improved management and sustainable use of natural resources in the production landscape (further information can be found at [www.worldbank.org/biodiversity](http://www.worldbank.org/biodiversity)). All of these activities have important links to poverty alleviation.

Over the last 10 years, World Bank funding for biodiversity has involved 226 projects with some US \$1.0 billion of World Bank resources, US \$450 million of Global Environment Facility (GEF) funds, and an additional US \$1.2 billion in co-funding from other donors, governments, non-governmental organizations, foundations and the private sector – a total Bank-managed biodiversity portfolio of US \$2.6 billion. Over the last 2 years a rapidly growing number of 'fast track' projects, involving medium sized GEF grants, has added strength, innovation and diversity to the portfolio, and has enhanced the Bank's ability to engage new partners. Analytical tools and skills allow us to measure the extent

of resource use, translate it into economic and social impact terms, and over time monitor the state of environmental resources and the benefits they generate. Methodological toolkits are being used to improve the quality with which biodiversity is dealt with an environmental assessments of infrastructure, rural development, structural adjustment and other Bank-financed projects. All these activities help to inform policymakers and guide those who design and implement development programs and projects. The recent collaboration with Conservation International in the launching of the Critical Ecosystems Partnership Fund stands to strengthen the Bank's toolkit.

Since the Bank's early engagement on biodiversity, it has been realized that biodiversity concerns cannot be seen as separate from mainstream Bank assistance for sustainable development and poverty reduction. The Bank has thus multiplied and diversified its initiatives, partnerships, projects and funding sources in an effort to better help client country partners meet these objectives. This implies that, in the future, the Bank's activities will further emphasize biodiversity conservation in productive landscapes, including agriculture, fisheries and other rural development activities, and the integration of biodiversity concerns into broader policies, programmes and projects. There are six main means by which the Bank plans to achieve this:

- Increasing the recognition of our responsibility, and that biodiversity links to our work and people's futures, and to discuss these matters with our partner governments and civil society.
- Moving more from 'do-no-harm' to 'do-some-good' with respect to biodiversity. This will mean deliberately looking for opportunities in collaboration with staff specialists and partners.
- Working more effectively with client country institutions to build local capacity to address the loss of biodiversity, as part of a broader effort to strengthen local institutions for environmental management and sustainable development.
- Exploring options for strengthening our technical capacity to recognize how sectoral reform and investments can help capture biodiversity benefits, what the options are for securing additional global benefits with concessional funding from global financing mechanisms, and how biodiversity degradation affects economies.
- Using funds from the global financing mechanisms more strategically to better blend with and catalyse Bank and other donor funding. This requires building capacity to better link GEF funding to local development priorities, associate GEF resources more programmatically with the country assistance dialogue and lending program, and to leverage GEF through

expanded partnerships including that with the private sector.

- Considering how best to assist our clients to participate in, and profit from, trade in environmental goods and services, especially those provided by biodiversity.

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### Revised Red List criteria

New improved categories and criteria used for listing plants and animals on the IUCN Red List of Threatened Species are now available after a 4-year review, called for by IUCN members. The review, coordinated by the Species Survival Commission, involving broad consultation with users and organizations from around the world, has produced a clearer, more open and easy-to-use system for assessing species. With particular attention paid to marine species, harvested species, and population fluctuations, the review has refined the effectiveness of the Red List categories and criteria as indicators of extinction risk. See <http://www.iucn.org/themes/ssc/redlists/RLcategories2000.html> for more details.

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### PrimateLit now available for searching

The Wisconsin Regional Primate Research Center has now made PrimateLit, a database for searching the literature of primatology, available in a new web format

(<http://primatelit.library.wisc.edu>). The database includes over 170,000 citations and covers the literature from 1940 to date. Indexed by the Primate Information Center in Seattle and managed by the Wisconsin Regional Primate Research Center in Madison, PrimateLit is being released in 'test' mode. The National Center for Research Resources, USA, is supporting this service – without fees or passwords – for everyone who needs access to the non-human primate research literature. Feedback on PrimateLit can be sent to Larry Jacobsen, Director, WRPRC Library and Information Service, Wisconsin Regional Primate Research Center, University of Wisconsin–Madison, 1220 Capitol Court, Madison, WI 53715-1299, USA. E-mail: [jacobsen@primatelib.wisc.edu](mailto:jacobsen@primatelib.wisc.edu)

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### New online journal of ecology

BioMed Central (BMC) Ecology is a new online journal that covers environmental and population ecology of plants, animals and microbes. It is published by BioMed Central (<http://www.biomedcentral.com>), a recently established online publishing house that makes original research articles in biological and medical science freely available to all. Anybody publishing with BMC Ecology has their article made freely available to anyone with Internet access. Instructions on how to submit a paper are at <http://www.biomedcentral.com/manuscript/checklist.asp>. For more information contact Peter Newmark, Biology Editorial Director, BioMed Central Ltd, Middlesex House, 34–42 Cleveland Street, London W1T 4LB, UK; E-mail: [editorial@biomedcentral.com](mailto:editorial@biomedcentral.com)