Lions in the Maasai Steppe

African lions and their long-term survival are among today’s major international conservation issues. Although it is difficult to accurately estimate the total number of the remaining African lions, scientists believe lion populations have dramatically declined throughout Africa. Expert guesses estimate that today there are fewer than 50,000 lions remaining in Africa from more than 100,000 two decades ago. Threats facing lions and other large carnivores include habitat degradation, over-exploitation through hunting, and diseases. But perhaps the most serious threat to long-term lion conservation is persecution by humans through retaliatory killing due to perceived or real threat to livestock and human life.

The Tanzania’s Maasai Steppe is a highly dynamic ecosystem with the seasonal wildlife migration between core protected areas (Tarangire and Lake Manyara National Parks) and the wet season dispersal areas in communal lands, leading to high degree of interaction between humans and wildlife. This increases human-lion conflicts due to livestock predation and each year lions are killed by pastoralists in retaliation for livestock predation. Protected areas can not ensure long-term lion survival in this human-dominated landscape, especially as the human population keeps expanding. The long-term conservation prospects for lions will depend on resolving conflicts with humans and promoting human-lion coexistence in this landscape. With intimate knowledge of the Maasai Steppe and its carnivores, Bernard Kissui oversees AWF’s lion research in the Maasai Steppe Heartland. The research over the past few years has focused on understanding the extent and pattern of human-lion conflicts due to livestock predation, and developing strategies to mitigate the impact of the conflict to lions and to Maasai pastoralists. On the ecological side, the research has focused on collecting information on lion population ecology and demography and understanding the seasonal movement patterns of the lions.

Results indicate that retaliatory killing of lions is prevalent in the Maasai Steppe. For example, from March 2004 through 2008, 136 lions have been killed by pastoralists in retaliation for livestock predation, while more than 515 herds of livestock have been attacked by lions in the same period. This suggests that lions are highly at risk to retaliatory killing, while pastoralists suffer substantial economic losses due to predation. Ineffective husbandry -- especially poor livestock security at night -- greatly contributes to the increased livestock predation. At night, livestock is kept in enclosures (bomas) typically made of thorn bushes that do not provide adequate barriers against predators. Conservation interventions that focus on improved husbandry and especially improving livestock security could greatly reduce the impact of these conflicts.

continued on page 9
Tanzania: AWF Brings West Kilimanjaro Ranch to the Conservation Landscape

In AWF’s Kilimanjaro Heartland, after years of negotiation and intense planning, another piece of the conservation puzzle has fallen into place: Tanzania’s National Ranching Company (NARCO) and the African Wildlife Foundation (AWF) have signed a Memorandum of Understanding to design a sustainable future for the West Kilimanjaro Ranch and the surrounding area.

West Kilimanjaro Ranch (WKR) covers about 32,700 hectares (80,800 acres) and links Mount Kilimanjaro National Park to the recently created Enduimet Wildlife Management Area in Tanzania. The area, considered one of the most important pieces of the conservation landscape in all of northern Tanzania, is home to 600 elephants and is an important ecological link between Arusha and Kilimanjaro National Parks in Tanzania and Amboseli National Park in Kenya.

Securing the WKR will help integrate wildlife conservation and livestock management and reduce the risk of habitat fragmentation and degradation brought about by incompatible human development.

Like Tanzania’s Manyara Ranch, which AWF has helped manage for the past six years, the WKR is one of 14 government-run ranches that Tanzania had slated for privatization. For a decade, the WKR project foundered in court as area villagers fought for their claim to the land. With AWF’s help, the villagers settled the case out of court, withdrawing their claim in exchange for inclusion as ranch stakeholders and beneficiaries.

The MoU for West Kilimanjaro Ranch uses a management model that AWF and NARCO have shown to be successful in managing other ranches for conservation and livestock production. This collaboration of private, local and government stakeholders will allow all parties to play a role in conservation financing and income-generating activities.

AWF and NARCO are now surveying the ranch lands and developing plans for conservation-minded wildlife initiatives, tourism ventures and livestock uses. The goal is to develop a sustainable mechanism for both conservation and benefit-sharing with local communities that can be replicated in other priority areas in Tanzania and Kenya.
Innovative Partnership Secures Corridor for Conservation in Kenya

AWF, the Agricultural Development Corporation (ADC), and the Ol Pejeta Conservancy signed a memorandum of understanding that will bring wildlife conservation and, ultimately, tourism and economic benefits to the ADC Mutara Ranch, a government ranch in Kenya’s Laikipia District.

The partnership, which also aims to boost tourism, will benefit both wildlife and the local community by preserving the corridor for wildlife migration while establishing the infrastructure needed to support successful ecotourism and cattle ranching ventures.

“This type of partnership between a government agency, a conservation organization and a private company is one of the innovative ways AWF is working to secure the future of wildlife conservation in Africa,” says Dr. Helen Gichohi, President of AWF. “The key is bringing stakeholders together to protect wildlife to generate economic benefits and opportunities for local people.”

AWF Picks New Land Director

AWF is pleased to announce its appointment of longtime conservationist Kathleen Fitzgerald to serve as Director of Land Conservation, a position based out of AWF’s headquarters in Nairobi, Kenya.

Kathleen will direct AWF’s land and habitat conservation efforts across Africa, focusing especially on our private lands conservation program. Kathleen’s knowledge of and experience with large-landscape conservation in other parts of the world will help round out our technical expertise and advance our work in creating protected large landscapes.

Kathleen brings more than 15 years of experience in directing large-landscape conservation, protecting wildlife and natural lands, and engaging communities in conservation and wildlife initiatives. Previously, she co-founded and was Executive Director of the Northeast Wilderness Trust, a regional land trust in the northeastern United States. She has also held key positions at the Land Stowe Trust, the Wildlands Project, and other conservation groups.

Kathleen holds a Master’s degree in Botany and is trained as a naturalist. Her thesis was on the grey wolf in Canada, giving her direct experience with human-wildlife conflict issues. She has worked and studied in eastern Africa and speaks conversational Swahili.
CONSERVATION ENTERPRISE

A Lodge to Benefit Mountain Gorillas

Watching a mountain gorilla in its natural environment is an allure that many naturalists and particularly wildlife lovers cannot resist. It is an allure that continues to drive nature lovers and tourists to the Virunga Mountains of Rwanda in large numbers.

Historically, the Virunga Mountains has had a shortage of accommodation options befitting the rare tourism experience and reflective of the unique environment and ecosystem. This shortcoming had not escaped the African Wildlife Foundation (AWF). Since 2004, AWF, in partnership with the International Gorilla Conservation Program (IGCP – a coalition of AWF, Fauna and Flora International and the World Wide Fund for Nature), has been working to establish a facility that not only provides a complete luxury experience, but also is a model for community involvement in mountain gorilla conservation.

With over 46 years in wildlife conservation in Africa, AWF strongly believes that when local communities benefit from such tourism and other conservation-based enterprises, they have more incentive to protect gorillas and other wildlife. AWF has also realized over the years that although tourism in Rwanda is now one of the country’s fastest growing industries and revenues generated by gorilla tourism are quite high, little if any, are returned to the communities.

The Sabyinyo Silverback Lodge, which recently opened its doors, is a high-end, 16-bed conservation lodge on community land adjacent to Volcanoes National Park. The lodge provides the setting for a unique and exciting tourism experience in which visitors can experience local wildlife and see African conservation in action. But the uniqueness of the lodge goes beyond the luxury and location. Tourists who pay top dollar for the privilege of tracking mountain gorillas will be struck by the integration of the Kinigi community in the development of the Sabyinyo Silverback Lodge.

AWF successfully brokered a deal for the lodge’s development with the Kinigi community, which owns the land. To minimize the community’s financial risk, AWF helped structure a loan in which interest payments are only triggered by income and interest will only accrue when the community realizes commensurate income. In business terms, this is a “subordinated equity deal.” In conservation terms, it is a precedent that could open the way for conservation tourism development across the continent.

The conservation pay-off of Sabyinyo Silverback Lodge is substantial. Availability of exclusive accommodation attracts more guests to national parks, encourages longer stays, provides communities with a marketable tourism product and contributes to management funds for protected area authorities through increased gate collections and fees from gorilla permits. In addition, it compensates local residents in a meaningful way for their opportunity costs, and has strong links to sound conservation and resource management strategies.

More striking is the way partnerships between the various parties in the project are structured. Musiara Ltd/Governors Camp, a well-known private tourism operator, is running the lodge on behalf of the local community, represented by Sabyinyo Community Lodge Association (SACOLA). SACOLA is a registered community-
Wildlife isn’t the only thing that is vanishing in Africa. Traditional culture is also fading fast - a victim of modernization and development. But in the Chiawa chiefdom in Zambia along the Zambezi River, AWF is helping to conserve culture and wildlife in a single stroke while at the same time improving livelihoods through increased revenues from tourism.

Thanks to support from DGIS (The Netherlands, Directorate General for International Cooperation) and The Nature Conservancy, this year saw the completion of the first phase of the Chiawa Cultural Village, an authentic showcase of local life that includes traditional houses, a courthouse, elephant lookout towers, honey hives, boat building area, traditional foods, dancing, drama and even a museum that will be officially launched during the next tourism season.

**NEWS IN BRIEF**

**Chiawa Cultural Village in Zambia**

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**New Tourism Facility to Boost Conservation in Tanzania**

Deep in the Maasai Steppe Heartland lies Makuyuni JKT (Jeshi ya Kujenga Taifa or National Youth Service), a 10,000-acre tract of land directly adjacent to Manyara Ranch and linking up to the Essimangor Forest Reserve. This land unit is key to the overall conservation of the Kwakuchinja Corridor.

This idle land, which was facing serious degradation, has received a major conservation boost from AWF. In 2005, AWF signed a land management agreement with SUMA (Shirika la Uzalishaji Mali) JKT, a corporation representing government interests, aimed to develop conservation-based enterprises. And this past year, AWF brokered a deal between the JKT and Thomson Safaris Ltd. to develop a luxury tourism facility - a 30-bed luxury tented camp. The facility that provides AWF with an important conservation tool is scheduled to open its doors before the end of 2009.
DRIVERS OF CHANGE AWARD

Striking a Balance Between Conservation and Development

African Wildlife Foundation’s Heartland Program wins the 2007 Drivers of Change Award

In Africa, it is sometimes difficult to adequately strike a balance between conservation and development. However, The Heartland Program, a conservation program described as “innovative, science-based and with a landscape-level approach to conservation,” is showing that these two goals can be achieved without one compromising the other.

The African Wildlife Foundation’s Heartland Program includes both conservation and development goals and has made a remarkable difference in the areas within which it has operated since 1999. The project encompasses an area of more than 396,600 km² in East, Central and Southern Africa. Each Heartland comprises protected and unprotected land and includes land owned by the relevant governments, communities and private land owners.

The Heartlands Program is this year’s winner of the Drivers of Change Award in the Civil Society category. It impressed the judges by how it has driven change in conservation and poverty alleviation for the past eight years. While awarding the program, the judges noted that it had successfully achieved the “joining together of communities, NGOs and government sectors in the effort to bring both environmental and human needs on to one platform... The initiative and work achieved by the projects of the African Wildlife Foundation are not only of high quality, but are sustainable enough to benefit all parties involved.”

The program uses a holistic approach to balance conservation of natural resources and development to improve local livelihoods by getting communities directly involved in the co-management and sustainable use of the resources with which they live. Intervention strategies undertaken by the African Wildlife Foundation include improved land and habitat conservation, support for conservation business ventures, undertaking applied research and species conservation, support for training and capacity building and, where necessary, policy and legislation work.

Jimmie Mambela, the director of the African Wildlife Foundation, Zambesi, is quick to share the success of the project with its partners. “All the work we do is with the help of many partners...the credit for what we achieve is shared communally by individuals, governments, businesses and anyone else who works with us,” he says.

Mambela says the Heartlands Program came about as a result of the African Wildlife Foundation’s mission: “At first our focus was mainly on leadership development, training and capacity building, but we were always building up to this.” The program hinges on five strategic pillars designed in the context of the Southern African Development Community’s economic and development vision. The first of these is land and habitat conservation, which addresses land tenure issues. It documents the nexus between ecological and socio-economic perspectives, especially considering issues on functionality across the boundaries of Southern Africa.

The second pillar looks at species conservation and entails disseminating a clear understanding of the science that governs the survival and viability of individual key species to communities and their leaders.

In the third pillar, conservation enterprise, communities consider business opportunities based on natural resources they might be able to use. These are developed not only to benefit and improve local livelihoods, but also to support conservation through encouraging people to co-exist harmoniously with nature. At present, the African Wildlife Foundation is negotiating one such project on the Zambesi river system, where the length of the river means resources have to be shared among many groups. A pilot business development is under way.

Training and capacity building, the fourth pillar, recognizes the need for sustainable governance and the training of local community members in leadership skills, policy and legislation interpretation, which might have a bearing on natural resource management. To this end, trusts in Zambia and associations in Mozambique have been established and facilitated by the African Wildlife Foundation to ensure official recognition as legal entities. These have become conduits for community participation in sensitizing governments on policy.

The last strategic pillar centers on facilitation of transboundary collaboration and policy dialogue that serves to promote regional collaboration on matters of managing shared natural resources.

By Warren Foster
AWF Announces Its New Charlotte Fellows

The long-term conservation of Africa’s rich and unique wildlife resources depends on commitment and trained African leaders, managers and scientists. Consequently AWF has for years supported the capacity development of African wildlife conservationists.

In 1996, AWF introduced the Charlotte Conservation Fellows Program to provide support for African nationals pursuing Master’s degrees or doctoral research. The program was launched as a tribute to the late Charlotte Kidder Ramsay, a long-time conservationist. Ms. Ramsay was a great supporter of the need to increase the skills and abilities of African professionals and institutions in order to effectively manage the wildlife resources on the continent. Each year, AWF supports as many as five Charlotte Fellows. While expenses and materials vary according to recipient, scholarships are awarded amounts of up to $25,000. Since its inception, the program has helped 55 students from East, West, Central, and Southern Africa to pursue graduate degrees in fields ranging from biology and conservation economics to enterprise development and community conservation.

Women Scoop 2007/2008 Charlotte Fellowships

For the first time since its inception, AWF’s Annual Charlotte Conservation Fellowships went to four outstanding women:

Ms. Shivani Bhalla, a Kenyan, will study for a PhD in Zoology at the University of Oxford in the UK. Her research will investigate the ecology and conservation of lions in Samburu National Reserve in AWF’s Samburu Heartland. In addition, her study will assess the levels of predation among Grevy’s zebras, as well as the impact of lions on humans in the region. Shivani currently works for Save the Elephants as an education and field officer. Previously, she worked for the Kenya Wildlife Service as a wildlife biologist and naturalist in the Education Department. She holds a bachelors degree in Environmental Science and a masters in Wildlife Biology and Conservation. Recently, she was selected as one of the twenty Emerging Wildlife Conservation Leaders by a joint program of the US Fish and Wildlife Service; Defenders of Wildlife; Howard Gillman Foundation and the Wildlife Conservation Network.

Ms. Ifura Ukio, from Tanzania, will study for a Bachelor’s in Environmental Science at the University of Kwa Zulu Natal, Pietermaritzburg Campus in South Africa. Ifura currently works as a research assistant for the African Wildlife Foundation on the Maasai Steppe Lion Project in Maasai Steppe Heartland. She is currently the only female researcher at AWF. She will study human-lion interactions among the Maasai around Tarangire National Park. Ifura holds an advanced diploma from the Mweka College of African Wildlife Management. Her award is part of AWF’s process of developing women among its team of species researchers in the Heartlands, which has hitherto been heavily male dominated.

Ms. Galebotswe Pearl Pelotshweu, from Botswana, will study for a Master’s degree in conservation biology at Stellenbosch University in South Africa. Her research will focus on seasonal range and preferences of reintroduced rhinos in Moremi Game Reserve in the Okavango Delta in Kazungula Heartland, Botswana. Pearl currently works as a wildlife biologist for the Botswana Department of Wildlife and National Parks in the Research Division in Maun. She holds a first degree in Biology and Chemistry from the University of Botswana.

Ms. Irene Nadunga, a Ugandan, will study for a master’s degree in environment and natural resources management at Makerere University, Kampala, Tanzania. Her research will look at the protection and conservation of medicinal plants in and around Mabira Forest Reserve through an indepth investigation of their current ecological status and the management practices used. Irene who started off as a teacher has also worked as an Environment Officer for the Coalition for Crises Prevention. She holds a first degree in Conservation Biology from Makerere University.
New Wildlife Conservation Initiative

The African Wildlife Foundation plans to launch a new wildlife conservation initiative - conservation “easements” that generate benefits for rural communities in parts of Africa. Easements are frequently used in the United States and elsewhere as financial and legal tools to provide for continued use of key conservation areas and corridors by wildlife, while land title remains with the present owner. In most African countries, however, easements are not yet recognized under the law. AWF is working with partner and governments to create easement laws. In the meantime, AWF is using “leases” as a short-term measure for conserving these key pieces of land.

Under the Easements for Education Initiative, AWF will establish a trust using funds donated for conservation. AWF would then enter into long-term easement agreements with selected communities to secure critical habitat for wildlife. In exchange for this conservation agreement, the trust will generate income to be used to guarantee school fees and expenses for eligible children of that community to a certain age or standard of education. AWF has identified three sites in Tanzania, Kenya and Zambia, which will serve as a pilot for the initiative.

"Lions in the Maasai Steppe" Continued from page 1

Using information gathered over the years, Bernard is currently working with the local pastoral communities to implement some conflict mitigation measures including reinforcement of bomas using strong material such as chain-link fences to improve livestock security. Preliminary results show that bomas reinforced with chain-link fences are more effective against predators than traditional bomas; thus, the wide use of such materials has great potential to reduce livestock losses among pastoralists. Some pastoral families have already adopted the use of chain-link fences, purchasing the materials with their own cash. However, despite great support, many more families have not been able to afford the costs of reinforcement materials. Therefore, support through conservation programs to such families that will ensure the benefits of improved livestock security are widely appreciated across the entire Maasai Steppe landscape.

Bernard’s research has further found a link between daytime livestock losses in the fields and herding practices in the Maasai Steppe. The work of herding livestock is primarily done by boys aged up to 15 years. But boys are not as effective herders as the adults, which makes the livestock under their care more vulnerable to predation. Other ecological and husbandry-related factors could also contribute to daytime livestock predation in the grazing fields. More research is needed, however, to understand ecological as well as other husbandry-related factors associated with daytime livestock predation for developing intervention approaches.

Although the majority of lion deaths in the Maasai Steppe have been due to livestock predation, a substantial number of lions are hunted each year in hunting concessions spread across the Maasai Steppe. The sustainability of lion trophy hunting will probably depend on the success of the programs that reduce lion mortality due to other causes such as retaliatory killing for livestock predation.

Bernard hopes that the findings from this study will provide a basis for a better understanding of the ecological as well as socio-economic factors contributing to the human-lion conflict problem and pave way towards developing effective strategies for long-term lion and other large carnivore conservation in the Maasai Steppe.
AWF Partners with NEPAD in Conservation

The African Wildlife Foundation (AWF) has committed itself to assisting the New Partnership for Africa’s Development (NEPAD) roll out its vision and strategic framework for Africa’s development. The two organizations have signed an agreement under which they will jointly select and develop projects. The new collaboration is driven by the fact that AWF’s thematic areas of focus conforms to the NEPAD’s program of action and its integrated initiative to promote sustainable development in Africa. This is further reinforced by the fact that AWF is one of the key partners that operates within the framework of NEPAD.

The agreement identifies three broad areas for collaboration: NEPAD’s Fish for All Initiative, Promoting Sustainable Land Use Management, and Capacity Building for African conservation scientists.

Under the agreement, NEPAD advocates among NEPAD’s donors for additional financial resources for the joint AWF-NEPAD programs. AWF plans to pilot the Fish For All Initiative in its Zambezi Heartland (covering Zambia, Zimbabwe and Mozambique, with the potential to extend into Malawi’s Lower Shire Valley) with its own funding. It will also demonstrate the role of sustainable natural resource management in poverty reduction and economic growth within the ongoing African Heartlands Program and provide a platform for learning across Africa.

Kenya Wildlife Service Launches PAPF

What's PAPF?

Developed by the Kenya Wildlife Service with financing from AWF and technical support from the Conservation Development Center, the Protected Area Planning Framework (PAPF) is a framework for creating and operationalizing a comprehensive general management plan in a protected area: its vision, objectives, and activity plans; the stakeholders involved and the timeframe; and the details of where, how, and to what effect the plan is to be carried out. The framework covers all the facets of protected area planning upfront—ecological factors, tourism, community involvement, partnership and education, security and park operations. In bringing all these considerations under a single framework, the PAPF model establishes uniform planning, documentation, and action guidelines for everyone involved at all stages.
To ensure that the new planning model is accessible to all stakeholders, AWF also funded the development of the PAPF Manual after its final approval by KWS. The manual provides detailed, step-by-step instructions and illustrations, including a schematic of a typical PAPF planning document, which typically comprises five sections:

- **The Plan Foundations** section generally sets out an area description, a protected area purpose statement, and a description of the area's exceptional resource value.

- **The Zonation Scheme** describes visitor zones—the different types of visitor uses and tourism developments permitted within the zone.

- **The Management Programs** section describes the purpose and strategy, management objectives and actions, and three-year activity plans for five types of management programs: ecological management, tourism management, community partnership and education, security, and protected area operations.

- **The Plan Monitoring** section describes the anticipated positive and potential negative effects of the plan’s implementation.

- **The Annexes** include background documents, such as a problems and opportunities analysis, an inventory of the resource base, overview of the planning-process-related events and timing, and a list of participants involved in the planning and any related events.

**PAPF in Action**

KWS has begun rolling out PAPF to all its protected areas starting with its premier parks. As a key champion and one of the institutions involved in the development of PAPF AWF is now funding its use in developing general management plans in some of the most important wildlife protected areas in Kenya, mainly the Masai Mara and the Shaba/Buffalo Springs National Reserves.

Unlike other general management planning guidelines—which have tended to result in background documents that had limited day-to-day application—PAPF promises to make general management plans easier to develop, implement, and enforce. The uniformity of the planning process across protected areas will hopefully in time create consistently high quality conservation management, build stakeholder understanding and support and aid in the development of core planning expertise.
Our approach to achieving conservation impact in Africa is to encourage our partners to join us in focusing on a limited number of high-priority, large conservation landscapes that have the potential to conserve viable populations of African wildlife as well as key habitats and ecological systems well into the future. We use an applied science-based planning process to determine conservation objectives and to make these areas both ecologically and economically successful. Recognizing Africa’s wildlife cannot be conserved everywhere, the great majority of AWF’s resources and efforts are invested in these Heartlands.

What is a Heartland?

Heartlands are comprised of land units under different management and ownership regimes—national parks, private land and community land—in a single ecosystem ranging in size from 7,000 km² to 95,000 km². Some Heartlands fall within a single country; many extend across international borders of two or more countries. AWF’s initial planning horizon and commitment for work in a Heartland is fifteen years. Heartland program interventions include: support for improved protected area management; resource monitoring; participatory land-use planning; wildlife-based tourism enterprise development; securing local livelihoods and community-owned businesses; capacity building with local institutions; and enabling local leadership of wildlife and natural resource management.

Selecting and Establishing Heartlands

When selecting Heartlands, AWF works carefully to identify landscapes which have the most potential for effective and sustainable long-term conservation. Initially, AWF considers both regional and global biodiversity conservation priorities. Then, once a potential landscape is identified, AWF conducts a detailed analysis that looks at the biological, ecological, social and economic opportunities within the region. Once an area has been identified as a Heartland, we develop a detailed profile that includes the biological, socio-economic, and institutional attributes of the area, as well as identify key threats to conservation targets and potential conservation strategies that could be implemented. An area is officially declared a Heartland when the resources needed to implement an effective program are secured.

Working in AWF’s Heartlands

In each Heartland, AWF works closely with a wide range of partners and stakeholders (including national and local governments, communities, research organizations, other non-governmental organizations and the private sector) to develop priority interventions specific to the area. While each Heartland’s strategy is unique, each Heartland focuses its work in the following strategic areas: land & habitat conservation; species conservation & applied research; conservation enterprise; capacity building & leadership development; and policy.

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<th>AFRICAN HEARTLAND</th>
<th>COUNTRIES</th>
<th>AREA</th>
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<td>Kazungula</td>
<td>Botswana, Namibia, Zambia and Zimbabwe</td>
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<td>Kilimanjaro</td>
<td>Kenya and Tanzania</td>
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<td>Limpopo</td>
<td>Mozambique, South Africa and Zimbabwe</td>
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<td>Maasai Steppe</td>
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<td>Maringa-Lopori</td>
<td>Democratic Republic of Congo</td>
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