

# Africa Biodiversity Collaborative Group

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## **What is ABCG?**

The Africa Biodiversity Collaborative Group (ABCG) comprises seven international conservation NGOs (African Wildlife Foundation, Conservation International, the Jane Goodall Institute, The Nature Conservancy, Wildlife Conservation Society, World Resources Institute, and World Wildlife Fund) with the goal of working collaboratively and efficiently and effectively to further a sustainable future for the African continent. Funding has been generously provided by The John D. and Catherine T. MacArthur Foundation, the Critical Ecosystem Partnership Fund, the U.S. Agency for International Development, the U.S. Fish and Wildlife Service, and our members.

## **ABCG's Vision**

ABCG's vision is of an African continent where natural resources and biodiversity are securely conserved in balance with sustained human livelihoods.

## **ABCG's Mission**

ABCG's mission is to tackle complex and changing conservation challenges by catalyzing and strengthening collaboration, and bringing the best resources from across a continuum of conservation organizations to effectively and efficiently work toward a vision of an African continent where natural resources and biodiversity are securely conserved in balance with sustained human livelihoods.

## **Stay Involved**

Information, presentations, and other resources from this workshop and others are available on the ABCG website: [www.abcg.org](http://www.abcg.org). To keep up with ABCG, you are invited to join our listserv, follow us on Twitter (@ABCGconserve) or "like" us on Facebook ([www.facebook.com/ABCGconserve](http://www.facebook.com/ABCGconserve)).

### **ABCG Brown Bag – A 21<sup>st</sup> Century Approach to African Wildlife Conservation: Helping Africa's People Engage in the Conservation Arena**

ABCG held a brown bag presentation and discussion on September 29, 2011 from 12:00 – 1:00 pm featuring Dr. Laly Lichtenfeld from the African People & Wildlife Fund and hosted by The Nature Conservancy. A co-founder of the African People & Wildlife Fund (APW), Dr. Lichtenfeld is helping to build the capacity of rural Africans to engage in environmental conservation and sustainable livelihood strategies that promote the dual objectives of biodiversity conservation and poverty alleviation. At APW, she emphasizes the importance of place-based and community-led initiatives that support the collective management of natural resources. She presents examples from APW's programs in the Maasai Steppe of northern Tanzania including the unique Living Walls project, protecting livestock, saving lions.

## **A 21<sup>st</sup> Century Approach to African Wildlife Conservation: Helping Africa's People Engage in the Conservation Arena**

Dr. Laly Lichtenfeld, African People & Wildlife Fund

### *Presentation Abstract (from Dr. Lichtenfeld)*

In 2009, Africa's human population surpassed one billion. By 2050, it will have nearly doubled, reaching 1.8 billion people. This scenario predicts huge environmental challenges for people and wildlife across the continent. But, it also represents an incredible, potential resource of energy, intellect and opportunity. In the 20th century, wildlife conservationists focused on the establishment of protected areas and saving individual species. In the 21st century, it is now imperative to engage rural Africans directly in the conservation of their wild lands and species. If the population doubles as predicted, without real empowerment of local people in conservation and natural resource management, conservationists will have missed a critical opportunity to help local communities secure a healthy future for people and wildlife. A co-founder of the African People & Wildlife Fund (APW), Dr. Lichtenfeld is helping to build the capacity of rural Africans to engage in environmental conservation and sustainable livelihood strategies that promote the dual objectives of biodiversity conservation and poverty alleviation. At APW, she emphasizes the importance of place-based and community-led initiatives that support the collective management of natural resources. She presents examples from APW's programs in the Maasai Steppe of northern Tanzania including the unique Living Walls project, protecting livestock, saving lions. Dr. Lichtenfeld hopes, as Nelson Mandela has stated, that the 21st century will emerge as the "African Century."

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Natalie Bailey, ABCG Coordinator, welcomed everyone to The Nature Conservancy (TNC) and introduced ABCG.

Kristin Patterson, Manager of US Relations for TNC's Africa Program welcomed TNC staff, partners and guests. The Nature Conservancy has formed partnerships with small NGOs in Tanzania to help people secure land tenure and help manage their natural resources. She extended a sincere welcome and thanks to Dr. Lichtenfeld for presenting her work at TNC.

Natalie Bailey introduced Dr. Laly Lichtenfeld, a woman with a passion for Africa. She lives in Tanzania and is co-founder and executive director of the African People & Wildlife Fund and a research affiliate of Yale University's School of Forestry and Environmental Studies. She has over 15 years of experience in East Africa working with large carnivores and local communities and developing village-based conservation programs in Maasai land and southern Tanzania. She received her Ph.D. from Yale University for her research combining wildlife ecology and social ecology in an interdisciplinary study of human-lion relationships, interactions and conflicts. Dr. Lichtenfeld is a member of the African Lion Working Group, the National Geographic Big Cats Initiative, the Yale Large Carnivore Group as well as a recipient of the Fulbright Award.

## *Introduction*

The African People & Wildlife Fund (APW) has a unique approach to conservation in northern Tanzania that has been positively affecting both wildlife and the many people in the region. Tanzania is home to many endangered species and there have been incredible conservation success stories in Tanzania in the 20<sup>th</sup> century. For example, nearly 30% of Tanzania's land has been included under protected area status and there have been major advances in single species research. However, wildlife populations are still declining in Tanzania, East Africa and across the continent. Animals often have to move outside of the protected areas where they come into contact with humans who are also highly dependent on the available natural resources.

Seventy-five percent of the population of Tanzania lives in rural areas totally approximately 1.5 times the size of Texas. The large base of people living in rural landscapes depends on resources like firewood, water, agricultural, livestock, etc. As the population grows, people need more space which leads to more land degradation. People cut trees for charcoal, which is often made in rural areas and brought to urban areas. Bushmeat hunting is another case of resources being extracted and brought to urban and international markets. With more land degradation and limited resources, there is increased potential for conflict among the people.

In the Maasai Steppe, the future of both people and wildlife is incredibly intertwined. There is an incredible concentration of wildlife in and near the park (the second largest concentration of wildlife in northern Tanzania) and more than 90% of the Maasai Steppe is unprotected. Wildlife, including rare and endangered species, disperses out of the park for six months of the year and the majority of the calving occurs outside of the park. The dispersion works because there are no fences around the protected area, just a graded boundary. Without the tolerance of the people, this wildlife dispersion can't be sustained; however, while wildlife is free to roam the people can't go inside of the park. While this sets up the potential to conserve wildlife in the landscape it also sets the stage for human-wildlife conflict. The Maasai are pastoralists, dependent on livestock and the health of the rangeland, but are becoming more sedentary over time. Their very existence is being challenged by agricultural expansion; rangeland is being lost and wildlife habitat is disappearing.

APW's main purpose in this region is to help empower and engage rural communities to promote the health of community and wildlife populations. APW believes that the critical variables for long-term success are: rights, good governance, capacity building, active community management of natural resources and conservation leverage (benefits). They truly feel a long-term presence is essential and have focused on community-led initiatives that give people the tools and resources yet leave the decision-making in their hands. Their conservation vision is:

*"The long-term vision for the Maasai Steppe is the conservation of a dynamically functioning ecosystem that supports healthy human and wildlife communities. This vision involves working in partnership with rural people to support community-led initiatives for sustainable natural resource management."*

### *APW's Nolooho Environmental Center*

Nolooho Environmental Center serves as APW's headquarters and is located in the southern Maasai Steppe within the village lands of Loibor Siret and overlooking the southeastern boundary of Tarangire National Park. The 10-acre campus includes an educational center, staff offices, a 32-bed dormitory, visitor's cottage and features green design including rainwater harvesting and solar power. In addition to educational/training programs for adults, APW also has a large environmental education program for rural primary school children that includes environmental clubs, trips to parks, summer school programs, a 6-year scholarship for secondary school for star students, etc. The community educational facility/training center is where people can come to access resources and training courses to "improve their understanding of the environment and develop hands-on skills in natural resource management."

In collaboration with The Nature Conservancy (TNC), APW has adapted a conservation, or natural resource, management planning workshop for rural communities. They actually had to remove the term "conservation" from the vocabulary because people associate the meaning with parks which, to them, means lack of access to resources, removal, etc. The natural resources community action planning involves going through the adaptive management process to work with the community to define conservation targets, threats, the degree of each threat, and to establish an adaptive strategy for better natural resource management over time. This bottom-up natural resource management training is currently implemented at the village level and can be adapted for the needs of the community. Training people on GPS, computers, etc. changes the natural resource management focus from "the outside-in to the inside-out."

APW has been working to improving governance with "Reto-o-Reto" communities (Maasai for "interdependency") to address natural resource targets and ensure that interventions actually reduce threats and improve livelihoods as well as wildlife conditions. People realized if they left the decision-making solely in the hands of leadership that corruption was more able to "sneak in" and developed a set of principles to guide their management. Emerging principles of Reto-o-Reto committees for natural resource management include: 1) Formal ratification in village government and general assembly meetings; 2) Democratic election of the committee with rotation of the board (less tendency towards corruption); Clear mission and vision statements with organizational roles defined; Gender and sub-village representation on the committee (to establish trust among people from all parts of the community); Regular reporting of activities to the community (a check on governance).

APW has contributed to improved land and water management through their role as a service level provider. For example, they have helped to map out the land and water catchment areas. They realized a lot of immigrant livestock were coming from Kenya into northern Tanzania. The community accepted them and the immigrants settled in the water catchment area and were cutting down trees, grazing across the landscape, etc. Showing locals a map of where they put the immigrants provoked them to develop new plans and regulations for their placement including requirements for people to protect their resources, etc. The people also want to protect and set aside a "no use" piece of land for water and wildlife conservation. These decisions were made through the locals' own decision-making processes, based off of a little information that APW provided.

### *A Conservation Success in the Maasai Steppe: Living Walls*

APW's "living walls" are an example of how their approach has led to a significant conservation success affecting the conflict between lions, livestock, and the Maasai. Lions are disappearing; today there are an estimated 35,000 total remaining. To protect the people and cattle from lions, the Maasai traditionally build a ring of thorns around the family and cattle compound, called a "boma." The fences eventually get worn, which makes it easy for the lions to get in and harm cattle and people. Additionally, the Maasai have to constantly cut down thorns to repair this fence and thus many trees near the homestead are cut. Over time, this had led to significant landscape degradation.

APW has empowered people to study this conflict and track lion attacks on livestock and people. The data from lion attacks in one village have shown that most attacks (55%) occur in the boma and they decided that the homestead was the best place to begin to make an impact. From the Maasai perspective, attacks on livestock threaten not only the livestock but also the people, their income and their culture. Attacks on the homestead also lead to retaliation on lions 56% of the time, according to their data. Through communications with the Maasai community, they discovered the idea of incorporating chain link fencing with local *Commiphora* tree species to build what they call a "living wall." The *Commiphora sp.* fence posts are termite resistant, rot resistant and inexpensive, as opposed to imported fence posts. Local Maasai actually suggested using the trees as poles; a cut and transplanted limb grows into a new tree. In addition to suggesting the species, locals knew that the *Commiphora sp.* actually likes to be planted in the dry season after it sits a few weeks rather than in the wet season, which might seem more intuitive.

APW staff work with community members and pay 25% of the cost of the chain link fence. They set up a payment contract with families and the 75% cost generally translates to 2-3 of a family's goats or sheep. They work on a flexible repayment scheme with individuals to make sure it doesn't impact their household security. The families perform the labor, installing the fence and often weaving thorns back through the chain link to make it even harder for lions to see through.

Each living wall has had a 100% success rate at preventing lion attacks on the bomas. There are 50 living walls in place and another 50 are being built this season. Approximately 12,000 head of cattle and 1,000 family members have been protected so far – a major impact. Preliminary results based on years of data indicate that the decline in large carnivore attacks and conflict is real and a direct result of the living walls. In order to ensure that the project is actually having an impact APW has tracked their pilot sites carefully and has seen major reductions in comparison to villages with bomas without living walls. They are working closely with communities in line to receive the living wall program and expect a 20-30 year fence lifespan. This is a successful and cost-effective program and because it was the people's idea, it's culturally appropriate and it's working.

The living walls are just an example of how to truly engage people to think of their own solutions to an environmental problem. To the people there, "conservation" is a scary word and they are just now starting to say they want to protect the wildlife. Patience is essential for progress; people have to be ready. The community is now ready to look at different ways people can engage in alternative economies and they are moving towards the larger vision of protecting the landscape. On the Steppe, everything is connected and it's important to emphasize the benefits to the people and what works for them. The sky is the limit!

## Discussion Topics

### *Financing and Management*

APW's budget is approximately 300,000 USD per year. Dr. Lichtenfeld does the fundraising, approximately half of which is from individual donors. A huge amount of her time is spent raising funds to support the organization.

APW maintains 15 permanent staff members, all of whom are Tanzania citizens except for Dr. Lichtenfeld and her husband Charles. They are trying to build up the capacity of the country's citizens and are focusing particularly on those in their vicinity. At times there have been 60-80 local hires building at the center. One of the main points of the scholarship fund for students is to build capacity over time with the long-term goal of hoping scholars continue to college and can eventually run the programs at the Center.

### *Local Impact*

APW has a good relationship with the national parks. Their education program takes all sixth grade students into the park to view their natural heritage and the park waves the fees for the kids. Park staff members are very interested in the living wall initiative. On the natural resource management side, the park has gone through a lot of boundary demarcation – taking land from villages, etc. APW has been a good go-between for the communities and Parks.

Land tenure is a tricky issue in Tanzania because of the different land designations – game control area, etc. There is another organization working on land tenure in the area as well as an initiative to help people get land rights to that area and to the people. They are presenting boundaries, etc. now to try to get land tenure and actually holding a meeting at the time of this presentation.

The more robust boma living walls do not have a serious impact on the migration of the people in the area; they are not more sedentary. They have long term data on the Bomas – and most of them have been there 10-20 years. People are currently moving the cattle, not their households. In addition to the more permanent bomas, they also have other house compounds in different locations and those have been used consistently over time as well. However, as families get larger some need a new living wall. They've found though that they can actually take the wall with them by simply digging up the poles and transplanting them – they'll grow back! There is a lot of additional information on living walls on the website.

### *APW Community-based Approach*

APW thinks their program is absolutely replicable. If such Centers were put in the top 40 conservation areas, conservationists would be engaging in real conservation action on a wide-scale. APW would eventually like to expand their Tanzania program to other areas in the region. However, it's important to note that what should be replicated is the place-based approach. The key is listening to the voice of the people and working with them to help them develop their own programs. The actual solutions will have to be tweaked for each location.

Dr. Lichtenfeld believes that other conservation programs are not as effective because there aren't enough people on the ground pursuing community-based conservation. Young conservation leaders

need to be encouraged to be out in the field at all times doing the work; that the real actions occur on the ground. To make a difference and a connection, we need to enable people to help themselves. Even though that is being taught, it doesn't seem to be happening in reality. There needs to be a shift in approach from "outside in" to "inside out" – a paradigm shift in how conservation is being practiced in this time.

Attendee Dr. Heather Eves noted that this project is one of the most successful she has ever seen, and with that the brown bag ended.

\*After Dr. Lichtenfeld's presentation, graduate students Miriam Westervelt and Dennis ole Sonkoi from Virginia Tech presented their adaptive management project with the Loita Maasia Council of Elders: *Using PRA Methods with the Open Standards for the Practice of Conservation.*

### Resources

- [African People & Wildlife Fund](#)
- [Brown Bag PowerPoint Presentation](#)
- ["Natural Resource Management Across the Maasai Steppe, Tanzania"](#)



Photos by Natalie Bailey

