# African Wildlife News

1961–2013

#### YOUR SUPPORT AT WORK IN AFRICA'S LANDSCAPES

### AFRICAN WILDLIFE FOUNDATION®

AWF works in conservation land-

scapes large enough

to sustain a diversity of species, such as elephants, rhinos, and other iconic African wildlife, for centuries to come. In these landscapes—places like Kilimanjaro, Congo, and Kazungula—AWF and its partners are pioneering lasting conservation strategies that benefit wildlife and people alike.

### Inside THIS ISSUE



Poaching and illegal wildlife trafficking has brought forest elephants to the edge of extinction.



The Nature's Best Photography competition shows just why it's worth saving Africa's wildlife.



Discover the mysterious Pangolin, a truly unique species.



Communities worldwide seek the best educational opportunities for their children. Through a novel program, AWF Conservation Schools, AWF will provide access to high-quality education specifically to leverage conservation gains in wildlife-rich areas.

# **New School of Thought**

# AWF launches an ambitious new program based on a tested, but still novel, idea that high-quality schools can foster conservation

o hear Craig Sholley tell it, AWF never intended to build schools. Supporting capacity building and opportunities for conservation education, sure (see "On a Common Path" on p. 7). But physically building a school?

"At the time, we couldn't visualize a direct link between schools and conservation," Sholley, one of AWF's vice presidents, says.

Thus when AWF began discussions with a community in northern Tanzania about conserving a wildlife corridor in the Maasai Steppe, it was the locals, not AWF, who brought up their desire to have the nearby primary school improved. After carefully considering the merits of this quid quo pro—a school in exchange for a wildlife corridor—AWF committed to moving the existing Manyara Ranch Primary School from its original wildlife-rich location and rebuilding it in a less dangerous area.

Lupani School was a community request as well. In return for Zambia's Sekute community setting aside 20,000 hectares of land, part of a critical elephant corridor in the Kazungula landscape, AWF rebuilt the area's dilapidated primary school. (See "With AWF Support, New School Opens," *African Wildlife News*, Summer 2011.)

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African Wildlife News is published four times a year. © 2013 African Wildlife Foundation www.awf.org CFC# 11219 Printed with soy-based ink on recycled paper

# **The Impact of Schools**

ntil recently, the prevailing thought in conservation circles was that schools had only a nominal effect on the protection of wildlife and wild lands. Even at AWF, we weren't convinced that providing opportunities for general education—particularly at the primary school level—would result in tangible conservation gains.

Strategically, we weren't necessarily opposed to the concept. When two communities one in Maasai Steppe and one in Kazungula—separately requested that we rebuild schools in exchange for securing wildlife corridors, we assented because we had a specific quid pro quo in each case.

Philosophically, however, the jury was still out.

Until we began to see with our own eyes just what an impact schools can—and do have, on conservation and communities alike. In the past several years, we've seen an increase in wildlife and a vegetational rebirth on Manyara Ranch Conservancy and the Sekute Conservation Area, where the two schools are located. The communities have readily adopted more sustainable practices, and attitudes have changed to a point where people are embracing conservation as a key to their children's future. Parents have shared with us how life-changing these schools have been for their families.

Based on these results, discussions with partners in Africa, and critical feedback from supporters like you, I'm incredibly excited to share that AWF is launching a new program that will maximize the now-clear connection between schools and conservation. Called AWF Conservation Schools (ACS), this program will entail not only building schools but also providing teacher training, technology, and conservation curricula for communities living alongside wildlife.

As I am sure you will agree, education is a critical stepping stone toward a future where people don't directly rely on natural resource extraction for their livelihoods. We are giving children a solid base for lifelong learning and a natural foundation in how conservation can further enrich people's lives. It's a win–win, for communities and wildlife alike.

You can find out more about ACS in our cover story. And please keep an eye out for the next issue, where we'll feature a Q&A with our new director of AWF Conservation Schools, Daniel Wesonga. In the meantime, thank you for your loyal support of AWF. We hope we can continue to count on your support as we begin to implement ACS and other critically important conservation programs.

Patrick Bergin, Ph.D. Chief Executive Officer



Check out AWF's videos on Lupani School and Manyara Ranch School, plus our other videos on our YouTube channel, at awf.org/youtube





### Forest elephant on edge of extinction

A frica is witnessing the greatest surge in the commercial massacre of wildlife in recorded history, with especially vulnerable species such as elephants and rhinos targeted to meet the spiraling Asian demand for ivory and traditional "medicines." Now, a recent study published in the online science journal PLOS ONE indicates that the forest elephant, a distinct and smaller subspecies of African elephant, has been brought to the edge of extinction through illegal hunting.

The study, on which AWF collaborated and which we helped fund, found that 62 percent of Central Africa's forest elephants have been killed for their ivory in the past decade. Researchers further noted that sites with high human density, infrastructure, hunting levels, and poor governance are increasingly lacking in forest elephant populations.

"Urgent funding for on-the-ground protections, such as professional ranger training and equipment purchases, will be necessary to prevent the absolute extinction of these elephants, whose habitat modification traits are essential to the health of the African rainforest," observed Philip Muruthi, AWF's senior director of conservation science.

# Household fish farms

ith Mwandi Fish Farm (previously called Inyambo Fish Farm) well underway in southern Zambia, AWF is launching a smaller-scale initiative to establish 10 household-level fish farms. Households will dig their own

ponds; AWF will provide the liner and other materials, as well as the initial fingerlings to help households get started.

"Mwandi Fish Farm provides a higher-level enterprise where the revenue can foster community development and infrastructure," Nasson Tembo, Kazungula director, explained. "We are now empowering community members to get into enterprises at the household level."

# Let there be light

frican lion numbers have plummeted from more than 100,000 to less than 40,000 in the last century. A primary cause has been human– carnivore conflict: Lions often prey on vulnerable livestock and are subsequently killed by irate herders.



In Tanzania, AWF has worked with Indianapolis Zoo to introduce communities to predator-proof bomas, or livestock enclosures, incorporating chain-linked fencing that deters lions from preying on cattle. But it's sometimes helpful to have multiple options to choose from.

In northern Kenya's Samburu landscape, AWF partner Ewaso Lions is testing out flashing lights to warn lions away. Developed by an 11-year-old Kenyan named Richard Turere, who knows firsthand that lions were wary of herders carrying flashlights, the Lion Lights idea consists of "ringing" a boma with automatically flashing LED bulbs, tricking inquisitive predators into thinking the corral was surrounded by active attendants. "People in our area have really embraced this new way to reduce conflict," said Ewaso Lions Managing Director Paul Thomson. ■

# **Joy for Wildlife**

his March and April, AWF was featured in the popular Facebook game, "Joy Kingdom." In the game, players collect "joy" as they complete adventures; they can then give the "joy" to featured projects—generating real donations for wildlife conservation NGOs such as AWF. If you gave "joy" to AWF's wildlife this past spring: Thank you!

Special thanks to William H. Funk, who contributed some of the items in this section.

#### awf.org

# **Capture Africa**

ow better to capture the beauty of Africa and the raw power of its wildlife than through photography? Every year, AWF sponsors the "African Wildlife" category in the Nature's Best Photography Windland Smith Rice International Awards in an effort to bring Africa's wildlife—and the need to conserve it—closer to the general public. The following is a look at the winning photo (center) and some of the highly honored entries from the 2012 "African Wildlife" category.

The winners from all categories, along with other highly honored selections, are featured in a special permanent exhibition at the Smithsonian's National Museum of Natural History in Washington, DC, through 2014. If you can't make it to see the exhibit, visit awf.org/naturesbest



**Cape Buffalo Silhouette** *Duba Plains, Botswana* By Marius Coetzee, Durban, South Africa

"On the final evening of a 17-day safari, we took a short break near a herd of more than 1,000 buffalo. I looked through the viewfinder and one buffalo's impressive horns were the most outstanding feature in the frame. The African sun was setting and perfectly silhouetted my subject."

#### Black Rhino 🕨

*Lake Nakuru National Park, Kenya* By Paolo Torchio, Nairobi, Kenya

"I was driving slowly through the forest of Nakuru National Park, searching for the resident leopard typically seen there. Instead, I noticed a huge black rhino climbing the hill in my direction. The rhino came straight toward me, unaware of my presence, giving me the chance for an unexpected series of photographs at close range."



Masai Giraffe ▲ Masai Mara National Reserve, Kenya By Jayanand Govindaraj, Chennai, India

<sup>\$</sup>I was photographing a group of Masai giraffe eating the tender leaves of an acacia tree. Suddenly, this giraffe turned and looked straight at me, posing with a twig hanging out of its mouth. It was exactly what I was waiting for!"





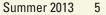
#### **CATEGORY** Chobe National P

By Ben Cranke, L

The Namibian-10, he began ta home. Previous in 2006 to purs and photograp

"One sweltering a camel thorn t elephant came of scent and charg my camera in m









Lion ▲ Masai Mara National Reserve, Kenya By Paul McKenzie, Hong Kong, China

"When I found this male lion, he was dozing under a tree. Late in the afternoon, it began to rain. As a female from the same pride came over a nearby ridge toward him, the male rose to his feet and growled repeatedly at her. I wanted to capture this behavior as well as his comical appearance, the rain having flattened his otherwise impressive mane."

White-backed Vulture ▲ Kalahari Desert, South Africa By Peter Delaney, Wilderness, South Africa

"The rains were late, the air was thick with swirling dust, and the wind was blowing sand. As the wind dropped, an eerie sensation descended upon the waterhole. The vultures circled—first in ones and twos, and within minutes the sky was full. Their approach was almost silent as they landed."

# WINNER: African Elephant A

ondon, England, UK

born Ben Cranke grew up in South Africa. At age iking photos and developing them in a darkroom at sly a veterinarian, Cranke left full-time employment ue his passions for photography, travel, climbing, hic tour guiding.

summer day, I was resting in the deep shade of ree at my campsite on the Savuti Channel. A bull down to the water to drink. He suddenly caught my red into the water to scare me off. Fortunately, I had y lap and was able to capture this image."

### ext year's contest!

ne 2013 contest is now closed, stay tuned for details on the 2014 Nature's Best Photography Windland Smith Rice ional Awards competition. The 2014 contest will open Jan. 1, 2014. Visit awf.org/naturesbest for more information.

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#### **New School of Thought**

(*Cont'd from cover*)

Both schools were intended to be one-off projects. But as the management team realized the extent to which the new structures were impacting the lives of local families and of their wildlife neighbors, our thinking began to shift. A clear relationship between schools and conservation was emerging. Meanwhile, many of the rural communities with which we worked lacked access to quality schools.

"There are communities that live alongside wildlife that crave for their kids to be educated. But in remote areas, this is particularly difficult. Children often have to travel long distances to attend school. School resources are lacking because of the difficulty in getting materials to these remote locations. Building upkeep may be poor, again, because of limited funding, and so on," explains AWF's Daniel Wesonga.

#### **Education where people live**

AWF is therefore launching an ambitious new program intended to provide rural communities high-quality education where they live. AWF Conservation Schools (ACS) will offer a replicable model by which AWF will create primary schools for communities in exchange for specific conservation outputs. All ACS schools will feature the following components:

- Architecture. AWF will build or rebuild a primary school and campus. Architecture will be tailored to climatic conditions (see "How habitat affects school design," below) and community needs. Buildings will use local materials where possible.
- Teacher training. AWF will provide regular teacher training to ensure the highest quality of instruction.
- Conservation curriculum. AWF will supply a curriculum that incorporates conservation instruction.
- Integrated technology. Just as with the IT lab at Manyara Ranch School (see "Not Just a Lab, but a Future," African Wildlife News, Summer 2012), every ACS school will include a technology component.



awf.org

During a visit to review Manyara Ranch Primary School, Commode Dushimimana, project manager for MASS, encouraged a student to envision what a conservation school would look like.

It's not a given that every community in a remote area will merit the consideration of a conservation school. But where an ACS school makes sense from a conservation standpoint, building the physical structure is only the first step. "This will be a long-term relationship," says Wesonga, our new ACS director. AWF will provide annual maintenance, help fund teacher incentives, and offer other assistance as needed.

Communities, in return, must adhere to specific conservation agreements. We will conduct an annual school and conservation audit to ensure "conservation covenants" are being met.

#### Investment in communities

We have already begun partnering with an architectural firm, MASS Design Group, to consider ACS' infrastructure needs. Though a young firm, MASS already boasts an impressive portfolio that includes a hospital and school in Rwanda, among other projects. The firm has

### How habitat affects school design

When it comes to building schools, habitat matters. "Climate and environment are incredibly important in determining how to make a school appropriate, comfortable, and durable," says Amie Shao, research manager at MASS Design Group. MASS is AWF's architectural partner in the new AWF Conservation Schools initiative. Here's a look at how habitat can drive a school's design:



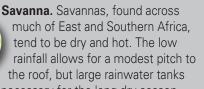
Afro-montane. Temperatures vary quite a bit in this ecosystem, so structures would benefit from thick walls to help even out temperature fluctuations throughout the day and shallow roof overhangs to let sunlight in.

Roofs angling into rainwater tanks would accommodate the high rainfalls during the two rainy seasons while ensuring sufficient water during the long dry season. Because of steep slopes, campuses may require terracing and retaining walls. The Virunga landscape is an example of an afro-montane habitat.



Forest. Forests are largely found in West and Central Africa. where many of AWF's future African Apes Initiative projects (see "Africa's Apes in Decline,"

African Wildlife News, Spring 2013) may be based. Highs can reach a whopping 90°F, so to stave off heat, buildings should feature vented roofs and low wall vents to draw in cool air, though care must be taken to keep out moisture. High rainfall demands steep roofs with large gutters, plus above-grade foundations to accommodate flooding.



are necessary for the long dry season. Schools in this ecosystem require vented roofs and generous shading.

attracted the attention of the architectural world for its thinking around how architecture can be used to meet humanitarian and broader social goals.

"We believe strongly that buildings can improve lives," explains founder Michael Murphy, adding, "I think it's pretty evident that for conservation to work, there has to be investment in communities. Part of that is investing in dignified infrastructure to improve lives."

Indeed, with proper planning, design, and community input, says MASS Research Manager Amie Shao, "These will not simply be schools but campuses that help the community build stewardship of the environment."

#### Not the exception but the rule

MASS is currently drafting a manual that provides guidelines around the building of an ACS school. AWF has, meanwhile, begun discussions with potential partners in the areas of curriculum development and technology.



Access to education is a powerful motivator for rural communities. In Kazungula, for example, the Sekute community set aside 20,000 hectares of land for an elephant corridor in exchange for a new primary school.

We are also making plans to retrofit Manyara Ranch and Lupani Schools to ensure they meet the rigorous standards being laid out under ACS. MASS representatives joined Sholley and our CEO, Patrick Bergin, on a visit to Manyara Ranch Primary School in February and have already provided some draft remodeling plans.

Which, perhaps, brings us back full circle. "This whole idea of looking at education and schools as a strategic way to facilitate conservation in Africa: It's very novel," says Sholley. "We thought Manyara Ranch School and Lupani School were one-offs. But they're not the exception; they're the rule. There are very few cases in the world where a community is not concerned about the education of their children. And if the idea of a conservation school can facilitate a conservation discussion, then in the end, everyone benefits."



#### By Micaela Samodelov

#### AWF looks at how its efforts mirror those of an organization launched to secure Africa's future

The Organization of African Unity—now known as the African Union (AU)—was created 50 years ago to act as a collective voice to secure the continent's future. AWF's mission remains distinct from that of the AU, but the following examples show just how the two organizations travel on a common path, toward peace and prosperity in Africa:

**1. Cultivating conservation leadership.** Newly independent countries prioritized education to improve standards of living. In 1963, the year the AU was founded, AWF helped establish the College of African Wildlife Management in Tanzania, which has allowed more than 5,000 students from 28 African countries to pursue careers that help sustain their countries' natural resources. Decades later, we launched the Charlotte Conservation Fellows Program, which, though not designed with the AU in mind, nevertheless supported AU objectives to promote research and advance the continent's development. Many of our Fellows have gone on to pioneer conservation efforts on the continent.

**2. Building community capacity.** Just as the AU seeks to "promote cooperation in all fields of human activity to raise the living standards of African peoples," building capacity at the community level is a major component of our conservation strategy. In the Regional Parc W landscape, overgrazing and other unsustainable practices were putting the ecosystem at risk for desertification, a threat to people and wildlife alike. AWF is working with the AU Interafrican Bureau for Animal Resources to help pastoralists and farmers create forwardlooking resource management plans. Such work has led to community grazing agreements, conflict resolution procedures, and more.

**3. Fostering sustainable development.** AWF has established eco-lodges that support community conservancies in numerous landscapes. Rwanda's Sabinyo Silverback Lodge and Clouds Mountain Gorilla Lodge in Uganda, for example, provide employment for locals and earn community income that villages use to improve infrastructure and meet other needs (such as for a health clinic). The lodges deter people from extracting resources from nearby forests—supporting the AU's goal of sustainable development.

**Photo at top:** Much like the African Union, AWF has approached its work in Africa in a way that not only promotes its mission of conservation but also peace and prosperity for all Africans.

Pangolin

## Wildlife Watch

By Madeline Johnson

f you were an incredibly fortunate safarigoer, you might run across an animal that looks like a cross between an anteater and an armadillo. This scaly mammal is the pangolin. The pangolin's scales will grow throughout its life and are made from keratin, the same protein as in human hair and fingernails. These dense scales cover the majority of its body and comprise an astonishing 15 percent of the pangolin's weight. When threatened, the pangolin rolls quickly into a ball, tucking away its vulnerable, soft underside and exposing a protective shield to his predator.

Pangolins are solitary, nocturnal animals subsisting on ants and termites. Their vision is poor, so they use their extraordinary sense of smell to locate their prey. Once they have

found their prey's nest, they use their strong claws to pry it open. They then can use their long, sticky tongue to reach into the nest and lap up the insects. Since pangolins have no teeth, they will often ingest sand and stones that assist their stomach in processing their food, similar to a bird's gizzard.

As pangolins live very secretive lives, much remains a mystery. We do know, however, that they remain threatened in the wild. Using their prehensile tail, they make their home in trees and burrows. Human encroachment on Africa's forests and



savannas has led to loss of habitat. Pangolin scales are rumored to have magical properties, such as guarding against evil spirits or even healing powers when ground into powder. Some Asian cultures also consider pangolin scales to be a delicacy.

AWF has long worked with communities sharing landscapes with pangolins and other species to create land-use plans and to provide incentives for sustainable agriculture, to minimize the need to move into surrounding wildlife habitat or hunt threatened wildlife for food. ■



# Are You 'Wild to Inspire'?

By Gayane Margaryan

AWF's new contest challenges you to test your nature documentary skills

AWF, NatGeo WILD, and the Sun Valley Film Festival have launched a contest where a winning nature documentary filmmaker will get to spend up to three months filming wildlife in the Maasai Steppe. Entries are due Oct. 1.

at Geo Wild, Sun Valley Film Festival, and AWF have announced the WILD to INSPIRE Short Film Competition, which gives aspiring documentarians the chance to win an apprenticeship with a renowned National Geographic filmmaker in Africa.

Until Oct. 1, people have the chance to submit their short nature film that inspires viewers to let the wild into their lives every day. The top three finalists get their entries screened at the 2013 Sun Valley Film Festival, and the lucky Grand Prize winner will receive a trip to the Maasai Steppe in Tanzania to be the documentarian of record for Tarangire National Park, Lake Manyara National Park, and AWF's Manyara Ranch Conservancy!

"The WILD to INSPIRE competition is a way for AWF to bring Africa to the world, while also shining a light on some of the challenges Africans face in living alongside wildlife and conserving their natural heritage," said John Butler, AWF's director of marketing.

