A Special Power WILDLIFE











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The wellbeing of wild creatures is important. Whether and how we protect that wellbeing is a reflection of our values and of our trustee relationship to all life on the planet. Importantly, wildlife also serves as the proverbial canary in the coal mine for the health and vitality of our earth.

For decades, Ashoka Fellows on every continent have pioneered one important new way after another to give wildlife a future. Each of these entrepreneurs' proven, practical social change innovations helps the others with technical learning, new power levers, new ways of organizing, and increasing public support.

This is an example of **Ashoka's special power** to change the world. That power flows from the fact that Ashoka is the global community of most of the world's truly leading social entrepreneurs and their partners. It is a community of trust and omnidirectional collaboration. The magnetic attraction of this community, much more than a network effect, is strengthening as (1) the community's team of teams architecture grows new sinews and effectiveness and (2) the historic emergence of the "everyone a changemaker" world gives the members of the community, working together, opportunities to be midwives to big history.

Here are just a few examples of the global team of Ashoka Fellows whose mosaic of innovations and increasingly close collaboration are key to opening a way forward for wildlife.

Trafficking



Dener Giovanini, Brazil (1999)

According to the 2014 Living Planet Report, Latin America has seen the biggest decline in wildlife – 83 percent since the 1970s – despite still having the richest wildlife diversity in the world. **Dener Giovanini**, elected an Ashoka Fellow in 1999, founded the National Network for Combating Wild Animal Trafficking (known as RENCTAS for its acronym in Portuguese), the first organization in Brazil to combat animal trafficking.

Dener remembers that in 1999 it was common to find wild animal traders in the open markets. People empathized with those trying to make a living any

way they could, he recalls. That is no longer true. RENCTAS has turned what was a nonissue into one Brazilian society cares about and increasingly is coming together to change.

To do so, Dener engaged every part of society in being part of the solution – citizens, journalists, government officials, civil society organizations, and companies. Brazilians across the country were given roles as trackers and reporters of illegal trading, and their observations and growing understanding helped RENCTAS create a national map of trading hotspots. Within just a year of Dener's launch, meanwhile, media pieces on animal trafficking rose from two dozen or so to close to a thousand. Fueled by national media campaigns (there have been seven now), this coverage has reached millions and served as a powerful recruiting tool for more citizen changemakers in a positive cycle.

The same citizens began demanding stricter government protections and wildlife management; and, spurred on by RENCTAS, in 2011 the Brazilian government passed a law that gives states broader authority to develop their own laws for fauna protection. Now the National Council for the Environment has invited RENCTAS to join it.



TRAFFICKING



"Help Itapemirim end this [wildlife] entrapment"— call to action on the Itapemirim buses

Whereas many activists enjoy denouncing companies, Dener's approach was, characteristic for an entrepreneur trying to change the system, entirely different. He sees and engages with companies as partners. For example, rather than vilify Itapemirim, the biggest bus company in Brazil whose buses were frequently used to transport wild animals in secret, Dener and his team worked in partnership with them on a public awareness campaign that appeared on all buses and at more than 2,000 bus stops across the country. In addition, bus drivers were trained and recruited as first detectors of illegal trade along their routes. As a result of this collaboration, black market wildlife transport on the buses declined by more than 80 percent.

Dener's entrepreneurial instincts are also clear in how he weaves the several actors together without putting too much of a burden or risk on any one. He makes it possible and safe for any citizen anywhere anonymously to report trafficking. Then RENCTAS systematically looks for patterns and follows up with the appropriate government agencies and officials. It also helps them investigate and followup. Thus, for example, when the police call because they have a truckload of wild snakes in their possession. Dener's network of hundreds of volunteer veterinarians and animal experts allows him to ensure that expert help shows up right away. Otherwise, the police would probably never want to hear of another wildlife case.

Typically for entrepreneurs, Dener discovered his power in his teens. At 19 he was one of the founders of Brazil's Green Party. While a biology major in college, he created a widely followed photography campaign revealing the litter and filth in which families in the Tres Rios dump lived, an early flexing of his ability to change public perceptions. He also organized 3,000 villagers to plant and wisely manage and use fruit trees.

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Dener's work in Brazil fits closely with that of many other Fellows. For example, in Mexico, Ashoka Fellow **Oscar Moctezuma** has been key to building that country's wildlife awareness and laws. His involvement is also hands on: He recently successfully reintroduced the Mexican wolf after thirty years of absence from the Mexican fauna.



While reintroducing indigenous forests, Brazilian Fellow **Clovis Borges** has saved the blue cheeked parrot from extinction.





GLOBAL TRAFFICKING

Despite significant changes in societal mindset, policy, and civic and corporate engagement driven by Ashoka Fellows across the world, animal trafficking is estimated to be a U.S. \$23 billion market and is on the rise, fueled by increasing global demand. 40 percent of animal trafficking in Brazil, for example, is for international markets. At the same time, animal trafficking is becoming closely intertwined with other networks of criminal activities (including drugs and human trafficking), making animal trafficking even harder to combat.

In light of this alarming trend, Dener and his team at RENCTAS plan to run a global campaign next year aimed at forming an international coalition to address the growing globalization of animal trafficking. He'll be able to move quickly (and cleverly) by starting with his Ashoka colleagues.

For example, Ashoka Fellow **Sarah Otterstrom**, who has been advancing the protection of wildlife in Central America, has a tool those fighting the trade can use. She fights for turtles. Six of the seven extant species of sea turtles are at high risk of extinction, and one of the biggest threats comes from poaching, sea turtle products being the second most frequently trafficked wildlife product from Latin America, originating mostly from Mexico and Central America. Sarah has devised an artificial turtle egg to find the poachers.



Sarah Otterstrom's looks-like-a-turtle-egg device to expose poachers' routes

IMPACT

"An ingenious project in Nicaragua has hatched a plan to thwart the illegal trade in sea turtle eggs by combining state-of-the-art printing with cell phone technology."



Sarah's InvestEGGator, a GPS-GSM onboard artificial egg that looks and feels like a real sea turtle egg, will suddenly make poaching routes visible. The technology is low-cost, and Sarah plans to make it available to conservationists and researchers working across the globe. The potential impact goes beyond protecting sea turtles; as eggs make their way towards regional and international markets, they are likely to enter other existing smuggling networks and thus bring to light secret networks dedicated to other major criminal activities.

Web of Life

The web of Ashoka Fellows dealing with wildlife works with monkeys, gorillas, orangutans, elephants, tigers, capybaras, whales, manta rays, and much more. Each has developed a new, big-scale, pattern-changing approach. As entrepreneurs, they take every factor and force into account. For example, they know that if their model isn't attractive to the local human population, they are highly unlikely to succeed.

Ashoka's great power is the omnidirectional network effect of all these approaches and entrepreneurs (and their organizations and movements). They trust and like one another. They fit together comfortably -- with one learning from another and the whole increasingly learning how to come together in Ashoka's now-central but still new collaborative entrepreneurship model. And they also have many synergies with the work of Fellows in other fields, be it community development or young people.

To convey a feel for the community of Ashoka Fellows dealing with major wildlife groups, here are a few examples.



An Indonesian Fellow is restoring native forests and protecting the country's orangutans.

PRIMATES



One of Gladys Kalema-Zikusoka's gorilla clients

Gladys Kalema-Zikusoka, the first female veterinary officer in Uganda, is showing how important it is to track and minimize the spread of diseases across three distinct populations: humans, domestic animals, and wild animals (gorillas). And how to do so.

Despite the fact that it is well known that diseases can spread from animals to humans (zoonosis) and from humans to animals (anthroponosis), this fact has been largely ignored in part because public health and wildlife efforts don't connect. Because of their similar DNA structures, gorillas and humans in particular can contract a wide range of similar diseases and parasites – from chicken pox to tuberculosis to polio – as well as infect one another. By correlating health developments in both human and gorilla populations, Gladys and her organization Conservation Through Public Health (CTPH) are better able both to prevent diseases jumping between these populations and to know how to react when they do.

CTPH analyzes hundreds of wildlife and livestock samples, working closely with the Uganda Wildlife Authority (UWA) in the Bwindi Impenetrable National Park, home to half the world's remaining 880 mountain gorillas. Among other things, UWA rangers collect fecal samples of mountain gorillas in the park which are used to develop and continuously update an early warning system for disease outbreaks. This system has already led to a measurable reduction in cross species transmission. CTPH also works with the public health authorities in Uganda, sharing data, making recommendations based on its analyses, and building new cross-sectional bridges.

In parallel, Gladys and her team train pastoralists to improve the health of the livestock in their communities and educate others on how to detect and report disease before it spreads beyond a singular species. Tuberculosis is of particular concern because it is a highly contagious and potentially lethal disease that affects humans, gorillas, and domesticated herd animals. By studying its progression and transmission among wild and domesticated animals, Gladys is gleaning valuable information for use in disease control for all these groups.



Gladys Kalema-Zikusoka, Uganda (2006)

A complementary approach to her work is to change public attitudes about health and sanitation. Gladys understood from early on that her results would be limited without healthier communities, especially those who live in close contact to gorillas and other wildlife, and that her team would otherwise be stuck reacting to disease outbreaks only. She formed Village Health and Conservation Teams in strategic locations with the express purpose of proactively educating the public, providing citizens with better health guidelines, and ultimately reducing the risk of transmission from humans who live within wildlife protection areas. Much of the work involves improvements in hygiene and sanitation, though its results are farther reaching, including a tripling in the use of modern family planning among women reached. To date, Gladys' organizations have engaged over 100,000 people in three protected areas in two countries – Bwindi Impenetrable and Mount Elgon National Parks in Uganda and Virunga National Park in DRC.

Gladys loved animals and decided to be a veterinarian at age 12. While in high school she developed an interest in biodiversity and began her conservation career by reviving her school's dormant wildlife club. While at veterinary school at University of London, she studied apes and conducted research on intestinal parasites in chimpanzees and parasites and bacteria in tourist-visited gorillas. Her current work was inspired by the observation that gorillas that came into close contact with tourists bore a larger bacterial burden than those that had little or no contact – which made it clear that there was an untold story in the interspecies communication of diseases.

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Gladys has many Ashoka colleagues with highly complementary work across the globe. In Indonesia, a Fellow has won sustained protection for the orangutan cousins of Gladys's gorillas. He's done so by restoring extensive native forests while also creating thousands of jobs tapping the extraordinarily productive arenga pinnata palm. The palm produces vast quantities of nutritious sugary water, is one of the most productive source of biofuels ever found (seven times as much ethanol as U.S. corn), has profoundly deep roots and is therefore stabilizing, and needs a diverse forest around it. Two Fellows in India and one in Nepal have also extraordinarily diverse approaches to protecting tigers, be they in the Himalayas or the Sunderbans coastal mangrove thickets of Bengal.



MANTA RAYS



Manta ray (Peruvian coast)

In 2009 two young Peruvian girls walking down the road made a landmark ecological discovery: the very first evidence of endangered green turtles in Peru. These girls recognized the potential importance of their discovery and reported their finding back to their community so that the turtles could be protected and studied. They are part of a changing generation in Peru that has begun to see the preservation of ocean and marine life as an integral part of their responsibility. Much of this change in mindset is due to **Kerstin Forsberg**, an Ashoka Fellow, and her organization Planeta Océano.

Kerstin believes that the well-being of marine life and local communities are interconnected. Via Planeta Océano she has created a community space where people can come together to learn about marine ecology, conduct research, share ideas, identify problems, and co-design solutions. Through this innovative conservation model cit-

izens of all ages are rediscovering the ocean from an ecological and conservation perspective and are leading initiatives that have already changed local business practices, government policy, and cultural attitudes toward conservation.

Planeta Océano also redirects economic activity from extractive practices toward those that actually benefit the environment. For example, until recently local fisherman had been catching giant manta rays for food. They otherwise knew very little about these sea creatures including the fact



Kerstin Forsberg, Peru (2011)

IMPACT

"Manta rays are now legally protected in Peru, and their image has gotten a boost too."



"Planeta Océano [founded by Ashoka Fellow Kerstin Forsberg] is introducing a global model for communitybased marine conservation."



that giant rays are at a high risk of extinction. Giant rays take 7-10 years to reach maturity, and they birth single pups only every 2-7 years. The total number of manta rays is in the low thousands, and the largest population is found in northern Peru. As a result of education and development efforts, local fisherman have effectively re-engineered a sustainable income stream from manta rays by shifting their commercial activities from fishing to running an eco-tourism association that brings international tourists to observe the rays.

At a differnt level, Planeta Océano has collaborated with teachers to develop marine education materials which Kerstin and her team are now working with the Peruvian Ministry of Education and the Peruvian Ministry of Environment to incorporate into the national curricula. Many of the educators in Pla-

neta Océano's Network of Educators have risen to become school directors and leaders of regional environmental initiatives that extend beyond the classroom. Yilmer Roque, one of the educators, launched a school-wide initiative for cleaning local river basins and is now collaborating with schools in neighboring Ecuador.

Young students themselves are now inspired to make their own contributions, including Josue Granda, a fourteen-year-old boy who has been around Planeta Océano volunteers like his older sister since he was only four years old, and who recently founded the first environmental club in his community that organizes mothers, siblings, and fathers, many of whom are fishermen, in the cleanup of beaches.

Kerstin has cemented her community work into national policy by successfully lobbying the Peruvian government to pass a law in 2015 to protect the endangered manta rays. Additionally, Kerstin has partnered with UNESCO to expand her community-led marine education model globally next year, and has started collaborating with the International Ocean Commission to spread ocean literacy. Kerstin knows that once local leaders, be it fishermen, young people, or educators, take on the role of environmental stewards, they will create a multiplier effect across their community by engaging their peers, siblings, neighbors, and parents.

ENVIRONMENTAL IMPACT





Ashoka is one of the world's most quietly powerful forces for environmental good. Hundreds of its environmental social entrepreneurs have, on every continent, redefined the field and changed national policy."

Frances BeineckeFormer President, National Resources
Defense Council





Ashoka has launched one key environmental innovation after another worldwide for 25 years now. It is one of the environment's most effective secret weapons."

Fred KruppPresident, Environment Defense Fund

