“COMMITMENT to CONSERVATION”

THE COLUMBUS ZOO & AQUARIUM CONSERVATION REPORT
Consider this…ninety-nine percent of all earth’s species (excluding plants) are smaller than a bumblebee. This intriguing biodiversity reality has stuck with me over the years—and is no doubt one of the facts that prompted Harvard professor E.O. Wilson (the scientist credited with popularizing the term “biodiversity”) to call insects and other invertebrates, “The Little Things That Run the World.” The ecosystem services provided by earth’s biodiversity—services often not readily visible—make life on our planet possible. Pollination anyone?

We have biodiversity on our minds this year…2010 has been declared by the United Nations as the International Year of Biodiversity. Why? Because we can no longer see ourselves as separate from the natural world. “Biodiversity, the variety of life on Earth, is essential to sustaining the living networks and systems that provide us all with health, wealth, food, fuel and the vital services our lives depend on.” From an aesthetic point of view—watching our elephant calf born last March, or our three little lion cubs frolicking with their watchful mother—one feels the joy in experiencing what has been called biophilia—the human bond with other species.

In this year’s report—Commitment to Conservation—you will read about the Zoo’s efforts to contribute to global biodiversity preservation through our Conservation Grants Program and other projects. As polar bears return to the Zoo with the opening of Polar Frontiers, we partner with Polar Bears International (PBI) to provide support for conservation of wild bears. Read about the work of two leading polar bear scientists in a feature article—The Big Chill—on pages 2–4.

We hope you enjoy this year’s report, and many thanks to all of our supporters. For more information on the Zoo’s commitment to conservation, visit our website at www.columbuszoo.org. To learn about 2010 International Year of Biodiversity, visit www.cbd.int/2010.
Commitment to Conservation
THE COLUMBUS ZOO & AQUARIUM CONSERVATION REPORT

A Big Bear Comes Along
The Zoo warms up to polar conservation ........................................... pages 2-4

Why Do Birds Suddenly Appear?
Expert shares his gift at the Zoo .............................................................. page 5

Elephant in the Room
Pachyderms need people more than ever ............................................ pages 6-7

Lives Linked in the Heart of Africa
A charismatic beast and the people who love them ........................... pages 8-9

Kids in Cameroon
How to save the world one field trip at a time ................................ pages 10-11

The Power of Positive Doing
PIC is taking care of business in Rwanda ............................................. pages 12-13

Monkey Interrupted
A second chance for pet trade victims ........................................... pages 14-15

Big and Hairy, Rare and Wary
What the world needs is more of these ........................................ pages 16-17

Stand By Your Ape
Year of the Gorilla doesn’t end here ................................................. page 18

It's Not Nice to Foul Mother Nature
Green is the new leopard-print at the Zoo ........................................ page 19

The Otter Limits
Where are they, and what do they need? ........................................ pages 20-21

The Race of a Lifetime
Cat conservationist sees spots before her eyes ........................ pages 22-23

On the Road
Creating happy trails for western wildlife ..................................... page 24

Let's Make A Deal
Chimps need trees; People need wood ............................................ page 25

Ten Years and Counting...
A meeting to remember ................................................................. page 26

Eat, Drink and Be Generous
Raise your glass for global conservation ..................................... page 27

Commitment to Conservation
Projects funded by the Columbus Zoo and Aquarium ................ pages 28-29

Left to right – Punta de Coles, a small peninsula on the southern coast of Peru, harbors rich marine biodiversity. Humboldt penguin chick in nest. Group of adult Humboldt penguins huddle on a cliff. Inca tern on the dock in Pucusana. The Zoo supports Peruvian NGO Pro Delphinus that works to protect critical coastal nesting sites. Photos by Rebecca Rose.
In anticipation of the opening of Polar Frontiers, the Zoo has joined forces with Polar Bears International (PBI)—a non-profit organization dedicated to the worldwide conservation of the polar bear and its habitat through research and education. PBI provides scientific resources and information on polar bears to all interested parties. PBI’s guidance, enthusiasm and willingness to share their wealth of knowledge ensures that the Polar Frontiers region—opening in 2010—will engage, educate and inspire Columbus Zoo visitors for years to come.

Leading scientists from around the world serve on PBI’s Scientific Advisory Council. When the Zoo wanted to provide support to the highest priority projects for the conservation of wild polar bears, PBI President Robert Buchanan introduced the Zoo to Dr. Steven Amstrup and Dr. Tom Smith—respected researchers and conservationists who are now receiving grants from the Zoo’s Conservation Fund.
Beaufort bears: Important Questions

In 2008, the U.S. Secretary of the Interior listed polar bears as a threatened species throughout their range. (There are five polar bear nations—the U.S. (Alaska), Canada, Russia, Denmark (Greenland), and Norway.) The listing was largely the result of research conducted in 2007 by the United States Geological Survey (USGS)—a team led by Dr. Steven Amstrup. Although this highly experienced team answered many questions about the likely future of polar bears in a warming environment, many questions remain to be answered.

Recent work by the USGS team suggests that polar bears in the Southern Beaufort Sea are already being influenced by habitat changes related to global warming. But an important question remains; what has the trend in the southern Beaufort Sea population of polar bears been in the past? Although simultaneous research on the Alaskan and Canadian sides of the Beaufort Sea began in the early 2000s, the USGS has been conducting research on the Alaskan side of the border since 1968. Looking at bear population size estimates from only the Alaskan side would not provide a clear picture of the entire population of polar bears. With a grant from the Zoo, Dr. Amstrup will apply Capture-Recapture methodologies to the Alaskan data beginning in 1968, which will provide a valuable estimate of the historic and current trends in bear abundance and survival in the Southern Beaufort Sea—including both the Canadian and Alaskan sides.
The secret lives of den mothers:

With the recent listing of polar bears as a threatened species under the U.S. Endangered Species Act, it is more important than ever to better understand bear ecology and how human activities may alter bear behavior. Dr. Tom Smith—a wildlife research ecologist and professor of wildlife at Brigham Young University—has launched a project entitled, “A Study of Polar Bear Behavior at Den Sites in Northern Alaska.” Dr. Smith’s team will document the behaviors and activity budgets of bears at undisturbed den sites along Alaska’s North Slope. Unlike other areas where studies of denned polar bears have been conducted, some of Alaska’s North Slope bears den and give birth in areas that may be subjected to substantial increases in industrial activity—particularly with major developments proposed for the National Petroleum Reserve Area (NPRA) and the Arctic National Wildlife Refuge (ANWR). The study is a step in the process of better understanding the sensitivity of denning polar bears to human activity. Before the effects of human activity on bears can be evaluated, scientists must first understand how bears undisturbed by people behave and divide their time.

Bear dens will first be located by forward-looking infrared cameras on aircraft; then probable dens will be verified through the use of Karelian bear dogs. At these sites, the research team will position time-lapse video cameras that will record all activity of the mother and cubs recently emerged from their dens (March through April). Monitoring of the bear dens will be accomplished by way of remote video imaging systems. The equipment is set up approximately 400 feet from the den, a distance experience has shown is close enough for detailed observations, but far enough away to be obscure on the landscape. After bears emerge from the den, they typically do not venture more than about 300 feet—so they do not disturb the monitoring equipment. Once the mother and cubs have left, it is safe for the team to retrieve the camera gear, measure the dens, and collect other information at the site. Results of this study will be used to better manage potential impacts associated with human activity in polar bear habitat.
With an uncanny knowledge honed since the age of five, Zoo board member Bernard Master set out last May to document birds on the Zoo grounds during migratory season. Having observed the pockets of natural habitat and native plants at the Zoo, Dr. Master had a hunch the grounds could offer a great birding opportunity; and when Bernie has a hunch about birds—it's good to pay attention.

A former Vice-Chairman of The Nature Conservancy and one of only 20 American members of the International Rare Bird Club—Dr. Master has seen 70% of the world’s birds and has birded in 78 countries. He co-authored the Annotated Checklist of The Birds of Ohio, now in its 3rd edition. Along with Jim McCormac, one of the premiere birders and botanists in Ohio and author of Birds of Ohio, Dr. Master led a group of 20 Colo Club members on an early morning adventure before the gates opened. As both Bernie and Jim can identify birds by their calls before ever seeing them (a skill Bernie describes as “similar to learning a foreign language”), the experience was exhilarating. With their help, even a beginning birder has a chance to view wondrous creatures.

After fattening themselves during winters spent in Mexico, Central America, South America and the islands of the Caribbean, about 200 species of neotropical migratory birds (songbirds, shorebirds, raptors and waterfowl) make this jaw-dropping journey of (depending on the species) a few hundred to 10,000 miles! Why do they do it? Because in a nutshell, migration increases breeding success. Traveling to find abundant, nutritious food, longer daylight hours, larger areas over which to range and maybe fewer predators—add up to a potential to raise more young birds.

Nesting grounds for neotropical migratory birds vary widely throughout Canada and the U.S., but these long distance trips require layovers for resting and refueling. Ohio is legendary as a migratory pathway for birds, and on a good day in May trees and bushes in some areas have been described as “dripping with birds.” Ohio harbors some of the best habitats for birds of any Midwestern state.

_A special thanks to Bernie Master for launching this new program at the Zoo, and to Jim McCormac for offering to enhance the experience in 2010 with a post-birding presentation on bird migration._

---

**SIGHTINGS (41 SPECIES)**

List of sightings compiled by Dr. Bernard F. Master
Limitations: Ohio; One Sighting per Species; From 5-13-09 to 5-13-09

- Canada Goose
- Mallard
- Turkey Vulture
- Mourning Dove
- Chimney Swift
- Red-bellied Woodpecker
- Downy Woodpecker
- Purple Martin
- Tree Swallow
- Northern Rough-winged Swallow
- Barn Swallow
- Cedar Waxwing
- House Wren
- Gray Catbird
- Swainson’s Thrush
- American Robin
- Blue-gray Gnatcatcher
- Carolina Chickadee
- Tufted Titmouse
- American Crow
- European Starling
- House Sparrow
- Red-eyed Vireo
- House Finch
- American Goldfinch
- Chestnut-sided Warbler
- Cape May Warbler
- Yellow-rumped Warbler
- Blackburnian Warbler
- Blackpoll Warbler
- Black-and-white Warbler
- Chipping Sparrow
- Song Sparrow
- White-throated Sparrow
- Northern Cardinal
- Rose-breasted Grosbeak
- Common Grackle
- Brown-headed Cowbird
- Baltimore Oriole
- Wood Thrush (h)
- Ring-billed Gull
Highly intelligent with deep family bonds, elephants live rich, nuanced lives… "The beast which passeth all others in wit and mind," in the words of Aristotle. As the largest land animals on earth with huge appetites and space requirements to match – elephants struggle more and more each year to cling to their remaining habitat; conflict with humans is increasing all the time.

The IEF was formed in 1998 to promote conservation of African and Asian elephants. Their mission is to support and operate programs both in managed facilities and in the wild. The International Elephant Foundation maintains an emphasis on management, protection and scientific research.

The Columbus Zoo earmarks funds each year to provide annual dues to the IEF and other like-minded organizations—and the Zoo’s assistant curator of the Mainland Asia region—Harry Peachey—serves on the IEF board of directors. With a substantial portion of its funding provided by AZA zoos, the International Elephant Foundation awarded grants to 12 elephant conservation projects in 2009, for a total of $165,000 – adding to the $1.4 million since its founding. “The economy may be down, but elephants still need our help,” said IEF President Charlie Gray. “Essential elephant conservation work will continue thanks to the elephants here in North America that inspire support for the International Elephant Foundation.” IEF-supported projects prevent human-elephant conflict, combat poaching, protect habitat, prevent disease, advance research and educate children and adults.

1. Uda Walawe National Park, Sri Lanka
This study of elephant behavior and population dynamics will inform wildlife management decisions that reduce human-elephant conflict and provide alternative development strategies.

2. Cambodian Elephant Conservation Group
Established by Fauna & Flora International (FFI), the Group aims to ensure the survival of Asian elephants in Cambodia.

3. Human-Elephant Conflict in Tamil Nadu, India
The project will address a viable management strategy for elephant reserves with a special emphasis on habitat corridor management to prevent human-elephant conflict.

4. Disease Investigation in Assam, India
Researchers will produce baseline data on infectious and non-infectious diseases to prevent future cases within wild elephant populations.

5. Gajah, Journal of the Asian elephant Specialist Group (AsESG)
Gajah – elephant in the Malay language, is an IUCN supported journal dedicated to Asian elephant conservation.

6. Sumatra Elephant Conservation Response Units, Indonesia
Utilizing previously neglected captive elephants and their mahouts, the Conservation Response Unit (CRU) mitigates human-elephant conflict, patrols and monitors protected forests, raises awareness among local communities, and offers ecotourism opportunities to promote elephant conservation.
Commitment to Elephant Conservation

In addition to membership in the International Elephant Foundation, the Zoo provides individual grants to enhance elephant conservation efforts in Asia and Africa:

- Satellite-tracking and social behavior of the Bornean elephant in Kinabatangan, Malaysia - Dr. Benoit Goossens
- Elephant Research Project (ERP), Botswana - Dr. Kate Evans
- Getting Along with Elephants, South Asia - Zoo Outreach Organization
- School Awareness Program for Elephants, Sri Lanka - Biodiversity & Elephant Conservation Trust

The National Elephant Center

The Zoo is a charter member of the National Elephant Center located on 300 acres owned by Waste Management in Okeechobee, Florida.

The NEC aims to be a world leader in elephant population management, conservation, scientific research, training, and elephant care to help ensure a sustainable future for elephants. Jerry Borin, retired director of the Columbus Zoo, serves as interim executive director of the National Elephant Center.

7. Capacity-Building by the Northern Rangelands Trust (NRT), Kenya
Helping both elephants and people, the NRT develops capacity and self-sufficiency in biodiversity conservation, natural resource management, and natural resources-based enterprises.

8. Community-Based Efforts by the Kalama Community Wildlife Conservancy, Kenya
The project enhances management of the ecosystem, and monitors wildlife and vegetation while raising awareness in the community.

9. The Waterways and Dura Recovery Project, Western Uganda
Poaching has devastated the region’s elephant population. This project stations rangers in key locations to improve monitoring and enforcement.

10. Save the Elephants, Samburu National Park, Kenya
Scientists in the remote bush country of northern Kenya have unparalleled access and insight into elephant behavior. The project includes environmental education for local children.

11. 2009 Elephant Research Symposium
Researchers and scientists share information to further conservation efforts for elephants in the wild.

12. Elephant Edotheliotropic Herpesvirus (EEHV) Research
EEHV is a disease that affects both wild and captive elephants. This ongoing study aims to identify the causes of EEHV in an effort to prevent future fatalities.
ising at 5:30am, the keepers enter the forest and endure the onslaught of insects—stinging, biting and otherwise—to cut leaves for hours in the tropical heat. It’s difficult work...chopping, sorting, bundling, washing and hanging bunches of leaves on wires strung across natural enclosures. The diet prep is only one aspect of the tender loving care extended to the velvety beasts residing at the Okapi Conservation Project in the Democratic Republic of Congo (DRC). Said one Congolese keeper, “I live for this work.”

The Okapi Conservation Project is located within the Ituri Forest in the DRC, the third largest country in Africa and the most biologically diverse on the continent. The Ituri Forest covers 58,000 square miles of lowland tropical forest and contains some of the most important closed canopy rainforest and species diversity in the world. In recognition of the importance of this unique ecosystem, which harbors high levels of endemism, including a large population of okapi, the Okapi Wildlife Reserve was gazetted in 1992, encompassing 5200 square miles. In 1996, it was designated as a United Nations World Heritage Site.

Initiated by the Florida-based Gillman International Conservation (GIC) in 1987, the Okapi Conservation Project (OCP) elicits support from zoos throughout the world that exhibit the animals for their visitors. The Columbus Zoo holds five okapi—two females and three males. These ambassadors help instill awareness of the rapid destruction of the tropical rainforests and generate financial support for the preservation of okapi habitat in the Democratic Republic of Congo (the only country in the world where wild okapi are found.) The Columbus Zoo provides $5000 to the project each year, and in 2008, provided an additional small grant for the production of an educational DVD.

The OCP has significantly contributed to the establishment and security of the Okapi Wildlife Reserve—an area of incredible diversity. The objective is to develop an economic and educational base on which a functioning okapi reserve can operate through programs such as agroforestry, conservation education, bushmeat alternatives and assistance to the community—coupled with direct support for the Institute in Congo for the Conservation of Nature (ICCN) to protect the Okapi Wildlife Reserve. In addition to protecting habitat for okapi, forest elephants, chimpanzees, forest buffalo and a wide variety of birds, the reserve is home to the Mbuti pygmies. They are among the few true forest people still living traditional lifestyles. With men averaging 4 feet 8 inches and women 4 feet 6 inches,
they are the smallest people on earth—hunter-gatherers who dwell in the deep forest. The continued presence of the Okapi Conservation Project in the region and Gillman International’s role as the primary coordinator and supporter of the Okapi Reserve has helped to provide stability for the region and its people, even during the devastation and chaos of a six-year-long civil war.

Relative peace has now returned to the DRC and the Okapi Wildlife Reserve. All military are out of the Reserve and are being disarmed and disbanded. During the war, the wildlife and people of the region suffered horrific losses. Scores of elephants, primates and other wildlife were killed by troops. Casualties among the local human inhabitants were high; homes, schools and health clinics were looted and destroyed and people were in daily fear for their lives. Yet throughout this terrible conflict, the Okapi Conservation Project staff continued to provide daily care for the animals, and no okapi were lost during the war. The project director and the wardens have worked with steadfast devotion to bring the Okapi Reserve back into full operation.

Clockwise from left – Pygmy woman by fire. Mbuit pygmies are among the few forest people still living traditional lifestyles. Healthcare workers with patient. Project director Rosemarie Ruf gives a loving pat. A strong bond forms between the keepers and the animals they brush and groom every day. Park guards with evidence for an illegal poaching case. ICCN personnel burning illegal snares. Photos courtesy of Okapi Conservation Project.

L’ Animal Unique

The “unique animal”—first described by scientists in 1901—remains largely a mystery to the outside world. Described as “clean, in a gown of velvet” by the keepers at the Okapi Conservation Project, the okapi (Okapia johnstoni) is one of many endemic species (including bonobo and Congo peafowl) found in the Democratic Republic of Congo and nowhere else on earth. Sometimes called “forest giraffe,” okapi have become ambassadors for all the species which share the Ituri Forest.

About the size of a horse, okapi stand six feet at the head and five at the shoulder. They weigh between 500 and 700 pounds and may live to 30 years of age. Their exceptionally long tongue (14 to 18 inches) wraps around leaves and branches, pulling in vegetation from more than 30 species of plants.

The stunningly beautiful brown and white stripes on their rump and legs serve a practical purpose, providing camouflage for the animal amidst the broken streams of sunlight filtering through the forest canopy.

Born with the same color patterns, the calves are little versions of the adults. To avoid leopards, they stay in one place on a “nest” for much longer than calves of other species.
early twice the size of the state of Oregon, the central African country of Cameroon is home to a spectacular number of animal and plant species, many found nowhere else in the world. For a variety of reasons, such as the unsustainable harvesting of wildlife for food (bushmeat hunting), many animals are under serious threat of being lost forever.

Cameroon enjoys relatively high political and social stability; nevertheless, large numbers of Cameroonians live in poverty. Most are not aware of how much of their wildlife is being lost and how quickly this is happening.

Limbe Wildlife Center (LWC) is a wildlife rescue and rehabilitation project in the South West region of the country. Founded in 1993 by the Pandrillus Foundation—a conservation non-governmental organization—Limbe provides care and comfort to critically endangered wildlife including chimpanzees, drill monkeys, western lowland and Cross River gorillas, several species of monkeys (including the locally endemic Preuss’s guenon), and various species of birds and reptiles.

Limbe plays an important role in local conservation by being actively involved in the implementation of national wildlife protection laws and by providing a safe home for animals seized by wildlife law enforcement agencies. By protecting and caring for the wildlife of Cameroon, the project provides one of the few opportunities for local people to see and learn about their own natural heritage and how they can become involved in protecting Cameroon’s rich biodiversity for future generations. On a practical level, the Limbe Wildlife Centre is one of the largest employers in the local community, providing full time employment to 30 Cameroonians who work as managers, guards, builders, educators, animal keepers and veterinarians.

While loss of habitat continues to be the most serious overarching threat to wildlife, commercial hunting of wild animals has become the most significant immediate threat to the future of wildlife in Africa and around the world, and has already resulted in local extinctions (Bushmeat Crisis Task Force.) When adult animals are killed, their dependent young are often captured to enter the illegal trade in exotic pets.
While the Limbe Wildlife Centre plays a critical role in breaking this cruel chain by providing a home for confiscated wildlife, all involved know law enforcement must be accompanied by strong, long-term educational programs. Simone de Vries, manager of Limbe, said recently, “It is very important that all children in the Limbe region get a chance to participate in the LWC’s education program. We are therefore delighted that Columbus Zoo has decided to fund the Outreach and Nature Club programs. We believe that education is the key to spreading the message of protecting Cameroon’s unique biodiversity.”

The Outreach team consists of eight Cameroonian educators whose topics include: an introduction to conservation and wildlife; the impact of humans on the environment; diversity of primate species; and the bushmeat crisis in Cameroon. The program ends with a field trip for the kids to Limbe, so they have a chance to observe and study animals up close. They each receive a special certificate upon completion of the course.

The Limbe Nature Club, while more informal, follows the same topics as the Outreach Program. The highlight in 2009 was a visit to the rainforest of Mount Etindi, home to chimpanzees, Preuss’s monkeys and other endangered species. A former local hunter acted as guide for the children, and could tell them about the decline in bushmeat hunting in recent years due to Limbe’s education programs and intensive control by the Ministry of Forestry and Wildlife. These children typically do not visit the forest, so it is a wonderful new experience. Even though the cost of transporting the children is relatively high, all involved agree it is absolutely worth it. To assess the effectiveness of the programs, students complete an extensive pre-evaluation questionnaire at the beginning of the school year, and post-evaluations at the end of each subject. The results show a spectacular increase in knowledge. The Columbus Zoo will continue support for these outstanding programs during the 2010 school year.

For more information see: www.limbewildlife.org
Partners In Conservation
When love comes around

Partners In Conservation (PIC) founded in 1991 by staff and docents at the Columbus Zoo supports conservation and humanitarian programs in Rwanda and the Democratic Republic of Congo. The Columbus Zoo funds PIC’s annual operating budget which makes it possible for all money raised by PIC to benefit both people and wildlife. By collaborating with conservation partners who provide local populations with skills, education, and liveable-wage jobs, PIC is able to help indigenous people become directly invested in saving their environment, which in turn, helps to conserve gorillas and other wildlife in this area of the world.

PIC is currently partnering and funding programs with four conservation organizations, two humanitarian projects, six schools, and an Artisan Project which enables 400 men and women to have an economic alternative and no longer need to use rainforest resources to care for their families. The Artisan Project not only provides people with economic alternatives which help preserve the forest and wildlife, but also increases positive discussions between PIC’s conservation partners and the artisans.

**PIC Funded Conservation Projects:**

- The Energy Saving Stove Project made it possible for more than 20,000 Rwandan families to own a new stove that uses 75% less wood than a traditional cook stove. The project is helping to preserve the forest, since families significantly reduced the amount of wood removed for cooking.

- The Beekeeping Project provides beekeepers with modern equipment, including smokers, which beekeepers use when gathering honey. This program is in place in fourteen of twenty-three sectors surrounding the Nyungwe National Park; no forest fires have been started by beekeepers participating in this project.

- PIC is financially supporting a Health Care Program that not only provides 370 gorilla trackers, park guards and their wives with medical care, but also helps protect gorillas from contracting human diseases.

**PIC Funded Humanitarian Projects:**

- The Imbabazi Orphanage is home to children orphaned during the genocide. PIC is currently funding an “Independent Living Program” for older children that enables them to attend college or learn a trade, learn to live independently, and be able to care for themselves as they reach adulthood.

- The Ubumwe Community Center (UCC) was founded in 2005 by Frederick Ndabaramiye and Zackary Dusingizimana. Zackary joined the Imbabazi staff as an English teacher in 2000 where he met Frederick who was living at the orphanage. Frederick was maimed in 1998 when he was fifteen, by people responsible for the genocide, after he refused to kill other people. The PIC Team met Frederick at the Imbabazi, and the Columbus Zoo arranged for him to receive prosthetic arms in Columbus, Ohio. Frederick wanted to find a way to “give back” by working with vulnerable people so they could have an opportunity to become independent. Through the UCC, handicapped adults are learning skills to ensure their livelihoods, handicapped and street children are attending school, and deaf children are learning sign language.
In 2006, the Zoo’s Board, Director Emeritus Jack Hanna, PIC and individual donors pledged funds to build a new facility for the Ubumwe Community Center. During construction, the UCC employed more than 30 local craftsmen each day, purchased most of the building materials locally, and hired skilled area carpenters to make the furniture. By utilizing talents of the community, the economy of the area significantly improved and graphically illustrated to people that conservation organizations can have a positive impact on their lives. In addition to services previously provided, the UCC now offers English and computer classes. The UCC currently offers 135 vulnerable children and adults an opportunity to reach their full potential. (PIC funds the annual operating budget for UCC.)

PIC realized that supporting the Imbabazi Orphanage and the UCC didn’t exactly fit within conservation objectives, but we knew that it was the right thing for us to do, since PIC works in a country recovering from genocide. An unexpected benefit from these partnerships is that PIC gained the respect of the Rwandan government for helping children and adults who survived the genocide. This opened doors for productive conservation discussions with Rwandan wildlife authorities. President Paul Kagame personally designated government officials to represent him at the dedication of the UCC.

Charlene Jendry, Founding Member
Partners In Conservation / Columbus Zoo and Aquarium / Email: Charlene.Jendry@columbuszoo.org

“You must be the change you wish to see in the world.” Mahatma Gandhi

PIC will continue building partnerships with other zoos and with projects in Rwanda and the Democratic Republic of Congo that address innovative solutions for both people and wildlife.
distressed at watching their precious wildlife disappear to the illegal pet trade, a group of concerned Guatemalans gathered 20 years ago—possessed with a steely determination to do something about it. ARCAS—the Association for the Rescue and Conservation of Wildlife (Asociación de Rescate y Conservación de Vida Silvestre)—was originally created for a specific and urgent purpose: to establish a rescue center to care for and rehabilitate wild animals that were being confiscated on the black market by the Guatemalan government. That was then…

Since its establishment, the ARCAS Rescue Center (located in the Petén region of northern Guatemala) has grown into one of the largest and most technically advanced rescue centers in the world, receiving between 300 and 600 animals of more than 40 species each year. Under a cooperative agreement with the Guatemalan government, ARCAS is recognized as the official destination for all confiscated wildlife taken from smugglers in the Mayan Biosphere Reserve. (The Mayan Biosphere Reserve in Guatemala together with the Calakmul reserve in Mexico, comprises the largest tropical forest area in the Americas after the Amazon.)

The Rescue Center is comprised of a quarantine area, veterinary hospital, three large rehabilitation enclosures, large flight cage, kitchen, dining and workshop area, volunteer house, and employee housing. Cages for animal holding are scattered throughout the forest in order to reduce stress on the animals. Most animals received at the Rescue Center are very young and require immediate, constant, and often long-term care. Hundreds of featherless, newly hatched parrots poached from wild nests must be hand-fed. A baby spider monkey, taken from its mother in the wild, can take more than six years to be properly rehabilitated and ready for release. During this time, they must be held and cuddled—often by ARCAS volunteers serving as surrogate mothers. Volunteers from around the world are a lifeline for ARCAS—generating over 50% of the organization’s total income. In 2008, 483 volunteers from 28 countries contributed 8,463 days of service.

The illegal trade in wildlife is a $6 billion-dollar-a-year global industry. "Today, anything large enough to be eaten or lucrative enough to be sold is hunted on a massive scale for its meat, skin, fur or feathers, for the pet trade, or as an ingredient in traditional medicines," says Elizabeth Bennett—director of the Hunting and Wildlife Trade Program for the Wildlife Conservation Society. "Wildlife populations are crashing, and
Far left inset – Confiscated turtles become education ambassadors for ARCAS.  Left – Scarlet macaws.  Top – Rebecca Rose and Nicole Weaver of the Columbus Zoo in front of the volunteer house at the Rescue Center.  Bottom – ARCAS receives hundreds of parrots each year.  Many do not survive the cruel treatment in the hands of poachers.

"...wild areas increasingly are losing their wildlife, becoming devoid of vibrancy and life..."  Given the success of the Rescue Center, and their nearly 20 years of experience in wildlife rescue and rehabilitation, ARCAS is a keystone in the development of an anti-wildlife trafficking strategy in the region.  With support from Humane Society International (HIS) and the Central America Free Trade Agreement (CAFTA), ARCAS has carried out public awareness campaigns on the plight of the scarlet macaw, sea turtles, and the illegal wildlife trade in general, including newspaper advertisements, press releases, and radio spots.

Recently, ARCAS senior staff members attended a workshop in Argentina sponsored by the International Fund for Animal Welfare (IFAW) on wildlife trafficking.  The long-term goal is to contribute to the establishment of a regional anti-wildlife trafficking and rescue center network.  Though this is a long way off, there is now more movement towards this common goal in neighboring countries.

For more information on ARCAS, or to learn about volunteer opportunities, see:  [www.arcasguatemala.com](http://www.arcasguatemala.com)

The Columbus Zoo is proud to be a 20-year supporter of ARCAS.
Little did Andalas the Adorable know when he was born at the Cincinnati Zoo that a long journey to an exotic location was in his future. In early 2007, he was transferred from the U.S. to the Sumatran Rhino Sanctuary (SRS) located in Way Kambas National Park on the island of Sumatra in Indonesia. The first Sumatran rhino born in captivity in 112 years, Anadalas officially reached sexual maturity sometime in early 2008, and over the next few years, he will become the big breeding male on campus at the SRS. He is spending time with Ratu, described as a young-but-presumably-experienced female, and gradually being introduced to Bina. In the meantime, an older laid back male–Torgamba–is mixing with Rosa and “teaching” her how to breed with a male rhino. If this sounds a little like the plot of a daytime drama for pachyderms, it is serious business for the international partners working with one of the most endangered mammals on Earth.

No more than 200 Sumatran rhinos survive in small, isolated forest fragments in Indonesia and Malaysia. The International Rhino Foundation’s (IRF) Sumatran Rhino Conservation Program uses a three-pronged approach, incorporating protection of surviving wild populations, managed breeding programs (especially in sanctuaries located in native habitat), and education and outreach programs to local communities. For many years, the Sumatran Rhino Sanctuary held only non-reproductive rhinos. With the advent of reliable reproduction of this species using methods developed at the Cincinnati Zoo–and the addition of two rescued, healthy young females–everything is in place for a successful breeding program. This population of five rhinos is integral as a research and insurance population for education and other purposes.
Below, clockwise from left – Andalas was born on September 13, 2001 at the Cincinnati Zoo. Andalas flew home to Sumatra in early 2007 to join other rhinos at the SRS. Indonesian keepers introduce Torgama and Rosa through a “howdy” gate. Torgama and Bina enjoy a spa treatment while cooling off at the Sanctuary. Inset right – Routine exam at the Sanctuary. Strong bonds develop between the keepers and their animals– All photos courtesy of IRF.

Given their critically endangered status, all of the project partners in the U.S. and Indonesia—including the IRF, Yayasan Badak Indonesia (the Indonesian Rhino Foundation), the Cincinnati Zoo, Fossil Rim Wildlife Center, and the Cornell University College of Veterinary Medicine—are working to learn as much as possible about the Sumatran rhino—including their basic biology, disease risks and food and habitat requirements. The five rhinos living at the Sanctuary in Way Kambas National Park serve as ambassadors for their wild counterparts, and provide important educational opportunities for local communities and the general public. In the future, these rhinos could be a source population for reintroductions once the threats to their survival have been eliminated in their wild habitats. Project grants from the Columbus Zoo help cover salaries for the Indonesian keepers at the Sanctuary.

They have leathery skin covered with coarse, reddish brown hair. Caked mud trapped in the hair protects the animals from insects and keeps them cool. They spend days wallowing, move at night, and feed just before dawn and after dusk using their prehensile upper lip to grab leaves, twigs, shoots and fruit. In spite of their bulky appearance, Sumatran rhinos are skilled climbers and swimmers. Females give birth to one calf after a more than 15-month gestation period.

Because of poaching for their horn, numbers have decreased more than 50% over the last 15 years. Sumatran rhinos exist only in protected areas where they are guarded from harm by Rhino Protection Units (RPUs).

For more information or to adopt a rhino at the Sumatran Rhino Sanctuary, visit the IRF website at www.rhinos-irf.org/adoptarhino/.
Year of the Gorilla might be over, but people—and gorillas—have a long way to go. With three of the four gorilla subspecies (mountain, western lowland, Cross River) listed as critically endangered and the other (eastern lowland) listed as endangered—new approaches are needed to reverse the trajectory of decline.

Launched in January 2009 by the Convention on Migratory Species (CMS), the Great Apes Survival Partnership (GRASP) and the World Association of Zoos and Aquariums (WAZA), Year of the Gorilla rallied like-minded organizations and individuals to spread the word about the world’s largest great apes. The main threats to these gentle giants run the gamut from habitat encroachment (mountain gorillas) to illegal mining and war (eastern lowland gorillas). Logging, ebola virus, and bushmeat hunting threaten western lowland gorillas, and severe loss of habitat makes the Cross River gorilla the most endangered subspecies. Some gorilla populations are the object of concerted conservation and restoration efforts. However, gorillas as a whole face severe threats. Failure to save them would be an irreversible loss since they are key species in the ecology of their forest habitats, which regulate global climate.

The Zoo supports projects for mountain gorillas in Rwanda, western lowland gorillas in the Republic of Congo, and education focused on gorillas in Cameroon. Throughout 2009, the Zoo’s gorilla awareness programs included theatre presentations, workshops, biofact carts, keeper talks for visitors, and a gorilla outreach program in 35 Columbus-area schools. All of these efforts will continue.

Gorillas share 98.4% of their genes with humans. They possess self-awareness, remarkable intelligence and an ability to communicate with signs and symbols as well as use some basic tools. They express emotions such as joy and distress in a way similar to humans. Year of the Gorilla patron Dr. Jane Goodall states, “We have a long way to go toward reversing the gorilla’s decline. It is time for us to pool all of our resources towards saving these magnificent creatures.”

Towards a green culture at the Zoo

Within a vibrant and fast-growing organization like the Columbus Zoo—including Zo Omaha Bay and Safari Golf Course—it can be a challenge to wrap our collective heads around green practices. In December of 2008, the Zoo’s board of directors articulated an official policy on sustainability with the statement, “Recognizing its impact on all stakeholders, the Columbus Zoo and Aquarium will develop a world-class sustainability program leading to the meaningful reduction of its carbon footprint.” With this, Zoo staff began to plan for a transition to a culture of sustainability. Broadly speaking, projects will aim to minimize resource degradation and depletion while maximizing resource efficiency. Programs are developing in the areas of:

◆ Providing cost-effective alternative energy
◆ Maximizing waste reduction and recycling
◆ Improving water management
◆ Developing local reliable food supplies for Zoo animals
◆ Utilizing green building technologies

Each program will include a public education component to enhance the Zoo visitor experience, and provide practical take-home ideas for greening their own home, neighborhood, and community. Look for these initiatives on upcoming visits to the Zoo, Zoombezi Bay and Safari Golf Course:

›› A food waste composting project at the Safari Golf Course Grill is collecting all food scraps, plates, napkins, drinking cups and utensils, and sending everything to a commercial composting facility.

›› A geothermal system is included at the new Polar Frontier region of the Zoo to provide a more energy-efficient way to heat and cool water for the polar bears and condition the indoor spaces for animals and zoo guests.

The geothermal heating and cooling system at the new Polar Frontiers region will reduce the Zoo’s use of fossil fuels. The calculated return on investment is less than 10 years.

The Zoo’s Green Team adopted a stretch of State Route 257 and will conduct two road clean-ups annually. Below left - The E-Waste Recycling event collected 160,000 pounds of electronics. Below right - Recycled glass trophy—first place in the Conservation Cup zero-waste event at Safari Golf Course – Photos courtesy of Barb Revard.

Climbing Mount Sustainability

Recycling is improving and increasing every day—with current programs for recycling cell phones, 6-pack rings, fluorescent bulbs, printer cartridges, aluminum, glass and plastic bottles, wood, tires, paint and solvents, lead batteries, construction and demolition materials including concrete, asphalt, gravel and steel.

An E-Waste Recycling event took place at the Zoo in collaboration with the Delaware, Knox, Marion, Morrow Solid Waste District. More than 1500 cars arrived to drop off in excess of 160,000 pounds of TVs, computers, monitors, printers and other electronic equipment—with all pieces being reused or broken into component parts and recycled in the U.S.

Over the coming months, Zoo staff will pursue grants for future sustainability programs focusing on alternative energy production, growing food on-site for Zoo animals, creating wetlands for water management, and additional green initiatives for the Safari Golf Course.
A zoology professor at the University of Peradeniya in Sri Lanka, Padma has served as the chairperson of the IUCN Otter Specialist Group—and currently serves as the Asian Coordinator. From Nepal to Thailand—Sri Lanka to Cambodia—Dr. de Silva has traveled the world to study otters, educate children and adults, and organize otter experts for in-country workshops on otter survey techniques.

Padma notes that in many parts of Asia, people are not aware of the existence of otters in their wetlands. Since otters are excellent indicators of healthy wetlands—and people depend on clean, functioning wetland ecosystems for their survival—conservation of otters and their habitat is imperative. After organizing successful surveys in India, Sri Lanka, Thailand, Indonesia, Vietnam, and Bangladesh, Dr. de Silva turned her attention to training local biologists on otter survey techniques. In 2008, a workshop held in Cambodia taught participants how to identify otters from specimens, skins, and photographs from camera traps—and how to carry out surveys for otters using direct and indirect evidence. The next workshop will take place in Indonesia.
Since 2007, otter researcher Jan Reed-Smith’s work with the East African Otter Project (EAOP) has concentrated on a little-known park located in the southwest corner of Lake Victoria. Rich with elephants, giraffe, chimps, hippos, crocodiles, and otters—Rubondo Island National Park is one of the few places where the historic Lake Victoria shoreline forest still exists.

As fish poaching has increased over the past two years due to poverty, poor land management, and an increase in fishermen from other areas—the East African Otter Project has stepped up efforts to work with local communities on protecting natural resources on Rubondo Island. With support from the Columbus Zoo, the EAOP provides books in Swahili and organizes field trips to Rubondo Island for members of local Conservation Clubs. Tanzanian Hobokela Mwamjengwa received a scholarship from the Zoo to attend one year of training at the African College of Wildlife Management—training that will help her work effectively with local communities on sustainable use of their natural resources and an improved quality of life.

With a tendency to live close to human fishing communities, and no conservation programs in place, the little marine otters of Peru are especially vulnerable. Listed as endangered under Peruvian law and on the IUCN Red List, the most recent population estimates for marine otters in Peru are more than 30 years old.

Biologist Joanna Alfaro of the Peruvian NGO Pro Delphinus, is filling the knowledge gaps for this imperiled mustelid. Marine otter distribution is limited to Peru and Chile. An accurate population estimate will provide valuable information on their status and distribution—and determine the best coastal communities for establishing conservation programs. By identifying fishing villages where otters live nearby—Joanna and her team will address current and potential conflicts (otters and humans competing for fish, pet dogs attacking and killing otter pups and adults) and distribute educational materials along with public presentations. Joanna’s work will lead to a technical report for Peruvian government agencies with recommendations for marine otter management and conservation.
In her forward to the book, “Spots Before Your Eyes – Cheetahs of Africa,” Dr. Jane Goodall writes, “It seems that whenever there is an animal species in a desperate situation, there will be an individual, or a group of individuals who, because they care and because they will not give up, may achieve the seemingly impossible.” For the magnificent cheetah—Africa’s most endangered cat—one of the never-give-up fighters is Dr. Laurie Marker.

Laurie is the founder and director of the Cheetah Conservation Fund (CCF), based in Namibia—a country in Southern Africa whose western border is the Atlantic Ocean. Namibia has the largest and healthiest population of cheetahs left in the world and the greatest potential of maintaining a habitat and prey base for the cheetah. Namibians are proud of their designation as “Cheetah Capital of the World,” and CCF’s vision is for a world where cheetahs live and flourish in coexistence with people and the environment.
Understanding the cheetah’s biology and ecology is essential to stabilize the population (estimated at 10,000 to 12,500 worldwide with about 3,000 in Namibia). CCF’s strategy to save the wild cheetah from extinction is three-pronged and includes research, conservation, and education—beginning with long-term studies to understand and monitor the factors affecting the cheetah’s survival (decline in prey animals, loss of habitat, and indiscriminate trapping and shooting as a livestock predator.) CCF has developed innovative approaches to the various challenges inherent in predator conservation. Their initiatives include:

◆ Conducting intensive research and publishing papers on cheetah genetics, biology, ecology, health and reproduction, human impact, and species survival—including assistance with the management of captive and free-ranging cheetah throughout the world. Laurie works closely with the Association of Zoos and Aquariums (AZA) Cheetah Species Survival Program (SSP) on conservation and population management issues, and serves as the international studbook keeper for cheetahs.

◆ Developing and implementing non-lethal predator control and other alternative livestock management practices (such as the Livestock Guarding Dog Program utilizing Anatolian shepherds, as well as relocation of problem cheetahs)—which work to eliminate the need for ranchers to kill cheetahs. To create long-term conservation strategies for the cheetah throughout their range, CCF researchers develop, test, and promote sustainable land-management practices such as conservancy development and ecotourism.

◆ Focusing on local and international education programs that illustrate practical ways in which cheetahs can be protected—addressing the needs and concerns of local communities and engaging in human-cheetah conflict resolution.

◆ Building capacity in countries that still harbor cheetah populations (cheetahs live in 24 African countries with 100 in Iran). CCF’s international program currently includes distribution of their award-winning educational materials, lending resources and support to projects throughout the cheetah’s range, and providing training throughout Africa and worldwide.

Namibia is the second least densely populated country in the world (after Mongolia), where 95% of the wild cheetahs live on private farmlands. Since its founding in 1990, CCF has earned the trust and respect of the Namibian people by focusing on practical solutions for people-predator coexistence. Healthy predator populations are critical for healthy ecosystems—people and cheetahs need each other. Dr. Marker and the CCF team are dedicated to ensuring a future for the long-legged cat with the distinctive tear marks—Africa’s swiftest hunter.

CCF’s vision is for a world where cheetahs live and flourish in coexistence with people and the environment.
For wild animals, good connections are everything. Protecting habitat to save species is not enough. National parks, wilderness and roadless areas, national wildlife refuges—all are wonderful and important. But when these core pieces of unique habitat become pretty islands in a sea of manmade obstructions (developments, highways, impenetrable fencing), our wildlife—bears, wolves, elk, pronghorn, moose, wolverine, lynx, and bighorn sheep—suffer in their quest to find food, mates and shelter. The creations of people become obstacles in the path between core habitats.

American Wildlands (AWL), based in Montana, has fought for more than 30 years to protect wild America throughout the western states. For the past decade, AWL has focused efforts in the Northern Rockies Mountain region of western Montana, northwest Wyoming and central and northern Idaho. Through their programs Corridors of Life and Safe Passages for Wildlife, AWL has built a long list of accomplishments.

Wildlife corridors are lifelines for animals—allowing migration and maintaining genetic diversity. A corridor can be a large undeveloped area for herds of migrating elk—or a narrow highway overpass, linking grizzly bear habitat on two sides of an interstate highway. AWL addresses on-the-ground threats to habitat connectivity by organizing and facilitating local working groups that consist of state and federal agencies, highway departments, railroad companies, county planners, land trusts, conservation groups, ranchers, and others—strengthening the conservation efforts of these working groups.

The Safe Passages program of AWL identifies the intersection between human highways and wildlife corridors. Their research and analysis will help inform long-term state transportation planning. Safe Passages Hotspot Analysis promotes the most promising techniques for making highways safer for people and wildlife. These include providing safe passage structures (both new construction overpasses and underpasses along with retrofitting existing structures) and providing information that helps drivers know where and how they can reduce the likelihood of hitting wildlife. On-highway driver information is delivered through specific signs, variable message signs, and animal-on-road detection systems. Off-highway driver information, such as public service announcements and news stories, can remind drivers to be vigilant when traveling in wildlife rich areas.

Learn more at www.wildlands.org
Visitors come from all over the world for a chance to track the habituated chimpanzees of Uganda’s Kibale National Park. The forest is also home to 12 other primate species (including the endangered red colobus) and harbors the densest populations of primates in Africa. Situated amid the foothills of the legendary Mountains of the Moon’s location at the interface of Central and East Africa has led to immense diversity; birders have recorded 335 species in Kibale.

But there are problems in paradise. Wood and charcoal are the sole sources of energy for more than 98% of the people living outside of Kibale, far above the average reliance on fuel wood in Africa of 40%. Much of the loss of forest in the region has been immediately outside protected areas—meaning the march of deforestation is fast approaching the National Park. According to the United Nations Food and Agriculture Organization (FAO), illegal logging is the primary threat to Uganda’s wild places. Until recently, Ugandans living around Kibale obtained most of their firewood from the small forest fragments surrounding the park. As the population increased (Uganda has the 4th fastest growing population in the world), this harvest became unsustainable and these fragments are gone. Since even small scale logging for firewood has been proven to be extremely detrimental to many plant and animal communities, an alternative is needed immediately if the rich diversity of Kibale is to be preserved for future generations.

Americans Rebecca Goldstone and Michael Stern have worked in Uganda since 2001. As founders and project directors of the Kibale Community Fuel Wood Project (KCFWP), they work with individual communities and their Ugandan team to protect all of the park’s wildlife and improve people-park relationships by facilitating energy stability in villages surrounding Kibale. In the past three years, the project has created 13 tree and stove demonstration areas, encouraged hundreds of people to start growing firewood at home, assisted over 500 families in building their own fuel-efficient stoves, opened four educational science centers, hosted dozens of workshops and educational contests, and presented more than 75 outdoor movie shows—engaging over 14,000 villagers in 2008 alone.
They came from Cameroon, Congo, Guinea and Kenya—Nigeria, Sierra Leone, South Africa, Uganda, and Zambia. Three days of hard work and a little bit of fun—and the Columbus Zoo felt honored to welcome 35 delegates to the annual meeting of the Pan African Sanctuary Alliance (PASA) in May 2009.

PASA is committed to the conservation and care of African primates through the unique alliance of African sanctuaries. PASA sanctuaries were created over the last three decades to accommodate the staggering numbers of orphaned chimpanzees, gorillas, bonobos, and other endangered primates in Africa. Today, PASA members and affiliated sanctuaries literally span the continent of Africa.

Each sanctuary is tailored to the species it protects and the country within which it works, but one aspect is the same in every facility—a deep and passionate interest in protecting primates and the wild spaces they inhabit. Jane Goodall said, “These refuges walk a fine line between conservation and captivity, yet their mission is no less important. They operate on the front lines in areas of hardship and danger, and their dedication to protecting mankind’s next of kin is admirable.”

Celebrating the 10th anniversary of PASA—members gathered on the last day for a symposium at OSU sponsored by Worthington Industries. “Saving Apes: The Role of African Sanctuaries” drew 350 guests and featured a keynote address by renowned primatologist Dr. Richard Wrangham.

The award-winning documentary “Bama’s Journey”—a chronicle of the work of Alfred Bama at the Limbe Wildlife Centre—had its U.S. premiere at the event. Proceeds from the silent auction organized by Zoo docent Mary Smith and event ticket sales generated $5000 for PASA. Meeting for the first time in the U.S. gave sanctuary managers an opportunity to thank long-time donors and cultivate new supporters. A special thanks to the Cleveland Zoo for their $3000 donation towards the event.
Wine for Wildlife
Excellent event under the tent  By Rebecca Rose, field conservation coordinator

There are many choices of things to do on a sunny, Sunday afternoon in October. Fortunately for the Zoo’s conservation projects around the globe, more than 200 enthusiastic bidders and shakers gathered to taste, toast, and enthusiastically hoist their auction paddles in the air—over and over, all afternoon—to benefit tigers and gorillas, amphibians and orangutans, manatees, mussels, and other endangered species throughout the world. As the dust settled following an exciting and entertaining live auction (thanks to the super-human talents of auctioneer David Reynolds), everyone involved felt the success of the Zoo’s inaugural wine auction, but the great news was yet to come. Through the collective generosity of sponsors, donors, board members, Zoo staff, and volunteers, the first Wine for Wildlife event generated $112,000 for the 70 conservation projects in 30 countries that receive grants each year from the Columbus Zoo Conservation Fund.

The Zoo gratefully acknowledges the passion and dedication of the Wine for Wildlife Planning Committee in the creation and realization of this event. Their expertise and leadership was invaluable.

Chairpersons – William Goldman and Joanna Felder; Committee Members – Brian Campbell, Susie Conrad, Chris Godley, Raj Hora, Christian Laver, Mary Rose, Jay Schoedinger

Along with the great financial outcome came a truly fun afternoon with spirited bidding by our guests on each lot. From Wine and Dinner for four at Tutto Vino and A Wine Lover’s Weeklong Vacation in Sonoma, California to creative offerings from the Zoo’s philanthropy department—like Jack Hanna’s voice on your outgoing voicemail message—there was something for everyone! A highlight of the afternoon was a special lot called “Fund a Conservation Need.” Following David’s description of the Kinabatangan Orangutan Conservation Project (KOCP) based in Malaysian Borneo—bidders rallied to the cause and donated $14,000 towards a new base camp for the project.
Projects Funded by the Columbus Zoo and Aquarium

Environmental Education/Local Capacity-Building/Workshops and Conferences

» SECORE (Sexual Coral Reproduction) Project – Puerto Rico, U.S.
» CERCOPAN wildlife veterinary internship program – Nigeria
» Conservation education around Sambisa Safari Park – Nigeria
» Education for Conservation: Okapi Wildlife Reserve – Democratic Republic of Congo
» Rubondo Island National Park – Student conservation education and community environmental outreach efforts – Tanzania
» Publishing Small Carnivore Conservation Newsletter – U.S.
» Getting Along with Elephants – Zoo Outreach Organization – India, Bangladesh, Nepal, Sri Lanka
» Sea Turtle Field Guide: FAQ for community-based tour guides – Commonwealth of Dominica
» Strengthening municipal reserve management – Philippines
» Training workshop, otter surveys, and expansion of otter wildlife rescue center – Bangladesh
» Conservation and education for the Amazon water world – Colombia
» Painted dog conservation: Iganyana Children’s Bush Camp – Zimbabwe
» Limbe Wildlife Centre education program – Cameroon
» Lion conservation beyond protected areas: Mitigation of human-lion conflict through community education – Tanzania
» Save the Orangutan: The KOCP Awareness Campaign – Malaysia
» Community-based sea turtle conservation – Sri Lanka
» Columbus Audubon bird information cards series – Ohio, U.S.
» Conservation of Hoolock gibbon through conservation education and capacity building – India
» Cheetah conservation education and community outreach – Namibia
» Belize Zoo harpy eagle environmental education program – Belize

Wildlife Rescue/Rehabilitation/Release

» Chimpanzee Conservation Center (CCC) – Guinea
» Monitoring reintroduced crested toads – Puerto Rico
» Wildlife rehabilitation, research and environmental education – Guatemala
» Post-release monitoring of released female chimpanzees – Republic of Congo
» Kalaweit gibbon and siamang conservation program – Indonesia
» Lola ya Bonobo Sanctuary – Democratic Republic of Congo

Conservation of Species and Habitat

» Antillean manatee capture, health assessment, tagging – Belize
» Conservation of Blakiston’s fish owls – Russian Far East
» Anatolian shepherd guard dog project – South Africa
» Spatial ecology and conservation of the jaguar – Belize
» Conservation of the eastern hellbender – U.S.
» The ecology and conservation of lions: Factors affecting the population dynamics within the Samburu/Buffero Springs/Shaba ecosystem and the surrounding areas – Kenya
» Conservation of the vinaceous amazon and other threatened birds and mammals of the Atlantic forest – Argentina
» Predicting human-elephant conflict and elephant movement in the Lower Kinabatangan – Malaysia
» Tree Kangaroo Conservation Program (TKCP) – Papua New Guinea
» Cheetah conservation and human impact – Kenya
» Siberian Tiger Project: Research, training, and conflict mitigation – Russian Far East
» Re-establishment of a critically endangered freshwater mussel – U.S.
» Sumatran rhino conservation and propagation – Indonesia
» Philippine endemic species conservation project: Protection program for the last viable populations of spotted deer and Dulungan hornbill – Philippines
» Conservation of the pangolin with community participation at Mountain Loi Lang region – Myanmar

Commitment to Conservation

The Columbus Zoo and Aquarium aims to have a direct effect on wildlife conservation through awarding grants which promote sound and sustainable practices that integrate conservation research, capacity-building, education, and community involvement around the globe.

For more information, or to view this report on-line, visit www.columbuszoo.org/conservation
Sumatran elephant’s dietary ecology, movement and habitat use: Using an ecological approach to save Asian elephants and their habitat – Indonesia

Conservation assessment and prioritization of habitat: A herpetofaunal perspective – Bangladesh

Conservation biology of lowland tapirs in the Pantanal – Brazil

Markhor conservation through community participation – Pakistan

Conservation Research

Cryopreserving endangered elkhorn sperm – U.S.

De Wildt wild cheetah project census and monitoring of wild free-roaming cheetah – South Africa

Enhancing site specific and national population viability of threatened upper elevation amphibian species of the Maya Mountain massif – Belize

Continuation of radio-collaring study of snow leopards – Mongolia

Creating habitat oases to conserve a critically endangered tortoise – Egypt

Integrated conservation program for Sichuan takin – China

Behavioral flexibility of Francois langur in response to ecological variation and human disturbance at Mayanghe Nature Reserve – China

Frogs in the path of an epidemic: Quantifying amphibian diversity and monitoring the spread of chytrid fungus – Panama

Survey for amphibian chytrid in anuran populations using swab-PCR analysis technique at Kinabalu Park and Crocker Range Park – Malaysia

Habitat effects on chytridiomycosis infection in the critically endangered Agalychnis moreletti – El Salvador

Mbeli Bai study of western lowland gorillas – Republic of Congo

Status and conservation of the West African manatee – Gabon

A study of polar bear behavior at den sites in northern Alaska – U.S.

Longitudinal trends in the Southern Beaufort Sea polar bear population – U.S.

Matabeleland leopard and cheetah project – Zimbabwe

Investigating ways to reduce rhino poaching in Assam – India

Rapid assessment survey of the herpetofauna at Chitwan National Park – Nepal

During 2008, the Columbus Zoo provided support to the following organizations through annual dues and other donations:

- Amphibian Ark
- BCTF - Bushmeat Crisis Task Force
- BFCI - Butterfly Conservation Initiative
- CBSG - Conservation Breeding Specialist Group
- HWCC - Human-Wildlife Conflict Collaboration
- IEF - International Elephant Foundation
- IIF - International Iguana Foundation
- IRF - International Rhino Foundation
- IRKA - International Rhino Keepers Association
- MRP - Manatee Rehabilitation Partnership
- OBS - Ohio Biological Survey
- OWC - Ohio Wildlife Center
- PASA - Pan African Sanctuary Alliance
- SLT - Snow Leopard Trust
- TSA - Turtle Survival Alliance
"The loss of species is the folly our descendants are least likely to forgive us."

Edward O. Wilson