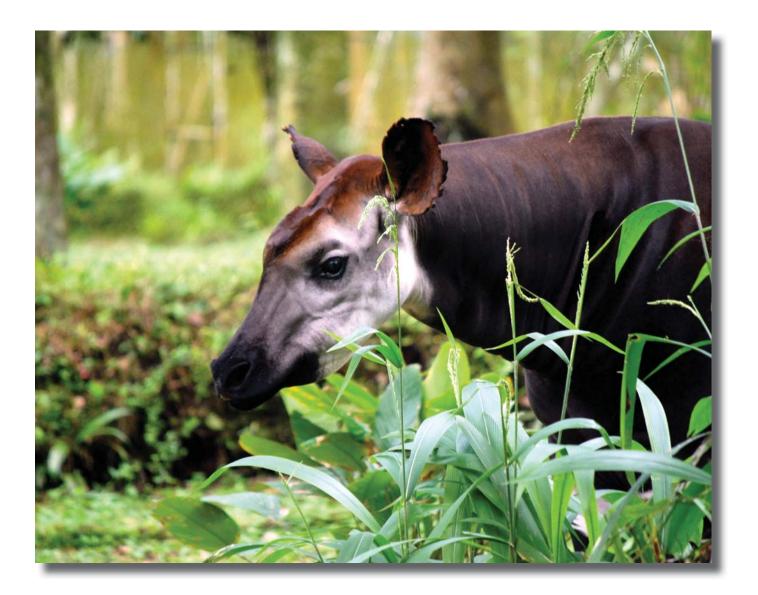


# **Okapi Conservation Project**



**Annual Report 2010** 

**THE MISSION OF THE OKAPI CONSERVATION PROJECT** is to conserve the okapi in the wild while preserving the biological and cultural dynamics of the Ituri Forest. The okapi is an endemic species of the Democratic Republic of the Congo and is the national conservation symbol of the country. As a flagship species, the okapi serves as an ambassador representing the incredible diversity of species found in the region.

The objective of the GIC Okapi Conservation Project is to protect the natural forest systems of the Okapi Wildlife Reserve (OWR -13,769 km<sup>2</sup>) by supporting and equipping government wildlife rangers; providing training and infrastructure development to improve protection of wildlife and habitats; assisting and educating communities to create an understanding of sustainable resource conservation; and by promoting alternative agricultural practices and food production in support of community livelihoods.

Greetings from the Okapi Conservation Project in Epulu and from White Oak Conservation Center. We are pleased to share the Okapi Conservation Project 2010 Annual Report with our partners and supporters.

The 93 Congolese people working for the Okapi Conservation Project and the 110 ICCN rangers and officers continue to dedicate their lives to the important conservation work at hand. The Ituri Forest remains a stronghold for okapi, elephants, chimpanzees and myriad other species, all dependent on the protection of ICCN. In addition to our support of the wardens and rangers working to protect the Okapi Wildlife Reserve, we continue to invest in the various programs of the GIC Okapi Conservation Project working with communities in the region to create understanding and engage them in wildlife conservation activities.



Our ongoing work with the people living in and around the Okapi Wildlife Reserve has taken an exciting new approach with the formation of Community Conservation Committees. With the intent of more effectively sharing information, the OCP education teams are encouraging customary chiefs in communities around the Reserve to take an active role in the formation and management of the committees, setting the stage for their community's increased participation in wildlife and forest management in their region. While law enforcement is an important component of wildlife protection, ultimately our success will rely on the engagement of the people of the Congo to control natural resource exploitation and safeguard their magnificent forest and wildlife heritage.

As always we recognize our zoo partners in the Okapi SSP and Okapi EEP, and our donors around the world, for their incredible support of the Okapi Conservation Project. We realize the economic climate has been difficult for many of our partners and, more than ever, the funds you provide are appreciated and critical to our work of saving the forests and wildlife of the Congo.

### **Okapi Global Conservation**

White Oak Conservation Center staff attended the Okapi SSP working meeting in Virginia Beach, VA and provided updates on our various programs. This included a report by Dr Linda Penfold on our efforts to develop semen collection and AI techniques for the okapi at White Oak and in Epulu.



As part of our efforts to promote awareness and support for the Okapi Conservation Project, White Oak Conservation Center is working with the Okapi SSP to provide a pair of okapi for the Okapi EEP program. The animals have been identified at Okapi SSP holding institutions and plans are underway to transfer the animals in the spring of 2011. The Okapi EEP population is in need of more breeding females and a more integrated international program may provide the impetus to grow both populations. The European holders also provide significant annual support for the Okapi Conservation Project.

In 2010 the OCP continued to work with Dr. Mike Bruford at Cardiff University, UK, who has developed microsatellite genetic markers which will enable his genetics lab to analyze DNA samples from okapi populations. A plan is in place to analyze DNA from fecal samples of okapi living in the Okapi Wildlife Reserve to be collected during overall wildlife surveys, and during ranger patrols, being conducted in the Reserve in 2011. White Oak Conservation Center received a grant to support the collection and analysis of the samples and Cardiff student Dave Stanton will perform the analysis in the UK lab.

Once the Okapi Wildlife Reserve analysis project is underway we hope to expand the project to analyze okapi populations in other forests of the DR Congo. The recent publication below outlines the work of the Okapi Conservation Project and Cardiff University to identify the okapi microsatellites for use in population evaluation. Conservation Genetics Resource. Microsatellite loci of the okapi (*Okapia johnstoni*). April 2010. David W.G. Stanton, Linda Penfold, Xiangjian Zhan, Michael W. Bruford.



The Okapi Conservation Project (OCP) is pleased to share updates of our work with our partners. We are now publishing an electronic newsletter in the fall and spring of each year, and continue to send out the Project's Annual Report every year. We have initiated a Facebook page, a blog and a Twitter account dedicated to the Okapi Conservation Project.

In a special fund raising event, the Okapi Conservation Project worked with Ebay's Global Giving and participated in an "open challenge". By raising \$11,000 from 86 individual donors the Project was able to earn permanent placement as a project partner with Global Giving. Thanks to those who supported the campaign, including the Antwerp Zoo, which helped us achieve this important status. Keep an eye out for future "challenge" campaigns on Global Giving to benefit particular program areas of the Okapi Conservation Project, such as "Control Slash and Burn Agriculture" and "Reduce Bushmeat Poaching in African Forests".

The Okapi Conservation Project participated in a meeting concerning the ongoing management and priority actions of the Okapi Wildlife Reserve as one of the five World Heritage Sites of the DR Congo. The meeting was hosted by UNESCO and Congo's World Heritage Site partners and managers were present. UNESCO continues to provide support for Okapi Wildlife Reserve management and operation activities as an important World Heritage Site representing the forests of DR Congo.

The Okapi Conservation Project welcomes a new NGO partner KfW, a German aid program now working with ICCN in the Okapi Wildlife Reserve. Working closely with the Okapi Wildlife Reserve Conservation Committee, KfW will engage technical personnel and initiate important infrastructure projects over the next five years in support of the people and wildlife of the region. In cooperation with the Institute in Congo for the Conservation of Nature and the Okapi Conservation Project, a draft of the next management plan for the Okapi Wildlife Reserve has been created and circulated for comments. This plan was developed with funding from UNESCO.



Joseph Kabila Kabange President of the Democratic Republic of Congo visited Epulu on September 17, 2010. This is his second visit since he was elected president.

### **Okapi Conservation Project Highlights**

The challenges with ivory poaching are continuing in the Okapi Wildlife Reserve and the Institute in Congo for the Conservation of Nature (ICCN) rangers and wardens are working diligently to increase their presence, and to concentrate their efforts in areas of high poaching incidence. Two current OCP projects funded by the US Fish and Wildlife Service will help to strengthen ICCN's infrastructure and capacity, helping them become more effective in dealing with increasing illegal hunting for ivory and bushmeat.

On December 23, 2010, OWR rangers came across a



group of poachers while patrolling in the southern sector of the Reserve. The encounter resulted in the loss of ICCN Rangers James KUMBAYANGO and Didi Kambale BEMO during crossfire. These well trained men were vital members of the ICCN team and they will

be greatly missed. We pass along our sentiments to their families and friends for their loss in the line of brave duty for wildlife conservation in the DR Congo.

The GIC agro-forestry and education teams made trips to Wamba in the northeast sector of the OWR to work with territory officials to address conservation issues and promote the Project programs. This is the most distant territory for the Project and the most difficult to access due to the poor roads. The roads are a curse being nearly impassable during the wet season, and a blessing as they limit commercial exploitation of natural resources. The road to Wamba is scheduled for repair in 2010 and the Project teams are working in advance to create an understanding of the importance of conservation and to help the Reserve rangers establish a stronger presence to help combat illegal activities such as mining and poaching.



Bushmeat poachers' camp

As part of the OCP's ongoing commitment to capacity building, ICCN Okapi Wildlife Reserve Assistant Warden Gishlain Somba and Patrol Team Leader Dugira Abaka attended the Southern African Wildlife College wildlife conservation management courses in 2010. These courses provide state of the art training in wildlife law enforcement and protected area management, and upon completion these gentlemen returned to Epulu and will pass along their knowledge to their ranger teammates in annual on-site training exercises. The course has changed in recent years and now includes on the job training for three months during the course. The students are expected to apply and report on some of the techniques they have learned and most importantly, to share their knowledge with their ranger colleagues working in the Okapi Wildlife Reserve. Dugira and Somba have each reported that the course is extremely valuable, and an important life experience for them. This opportunity was made possible through a grant to the Okapi Conservation Project from the US Fish and Wildlife Service Wildlife Without Borders program, with help from the Southern African Wildlife College and White Oak Conservation Center.



The Okapi Conservation Project constructed a block of housing in 2010 for the ICCN Zunguluka Patrol Post located on the main road of the eastern border to the Okapi Wildlife Reserve. This patrol post is a critical entry and exit point for all vehicle and pedestrian traffic in the Okapi Wildlife Reserve and the rangers must maintain a 24 hour presence in their attempts to control illegal bushmeat and ivory trafficking. This project was made possible through a grant to WOCC from the US Fish and Wildlife Service Wildlife Without Borders program.

The OCP team in Epulu worked with ICCN and conservation partners to finalize a management plan for the Okapi Wildlife Reserve. This is an important guiding document for the future and conservation in the Ituri Forest. Consultant Dr. Conrad Aveling worked with the team to develop and write the plan, and his work was supported through a grant from UNESCO for World Heritage Sites.



Project support continues to help the families of rangers and staff who have been lost in the line of duty. We are happy to report that Berce Nsafuansa (above, right, with Elme Mutahinga), the son of Jean Nsafuansa who worked with the Okapi Conservation Project and ICCN for many years, is now studying wildlife conservation at the University of Kisangani (DRC). He visited Epulu during his summer break and helped OCP staff with various tasks and learning about our work. It is heartening to see him following in his father's footsteps.

Okapi Project intern Carolyn Sanguinetti worked in Epulu helping teach English to ICCN and GIC staff. Carolyn had worked previously at White Oak Conservation Center as a zoological intern, and spent time in the Congo with her family as a young girl. Carolyn was helpful to the Project as a teacher while in Epulu, and her internships with us helped her attain a job working in Gabon to habituate gorillas and chimpanzees with a Max Planke Institute project in Loango National Park in Gabon. Congratulations Carolyn!



White Oak Conservation Center is investigating the use of radio telemetry collars to gather behavioral, communications and ecological information from okapi in the Okapi Wildlife Reserve. In 2010 a radio collar was tested on a male okapi held at White Oak Conservation Center. We are working with partners to investigate the possible use of satellite and infrasound recording collars.

#### Education

The OCP agro-forestry and education teams are expanding their influence around the Okapi Wildlife Reserve, working along with ICCN and other NGO partners towards a landscape conservation approach. Meeting with customary chiefs around the Okapi Wildlife Reserve the OCP education team and ICCN rangers (*below*) help form community conservation committees which then work to inform the local communities of the importance of wildlife and forest conservation, and encourage their participation in control of natural resource exploitation. The agro-forestry component assists the communities with techniques that improve subsistence farming methods. The hand in hand approach is proving quite effective, both for sharing information, improving livelihoods and partnering with communities to control human pressure on the Ituri Forest.



The OCP intensified education team contacts in the northern sectors of the Reserve through meetings with leaders, and workshops with local committees, with the goal of teaching communities on the importance of monitoring natural resources. Two meetings held with committees in Wamba (35 participants) and Watsa (53 participants) focused on conservation status of the OWR, and poaching and responsibilities of stakeholders for sustainable utilization of natural resources. Funding provided by UNESCO included the purchase of 5 motorbikes and 300 iron sheets as gifts to the Wamba communities as motivation. On the same occasion, the education team organized girls and boys soccer competitions to highlight conservation messages for the public. Other similar meetings were held in the villages of Badengaido, Bandisende and Banana in 2010.

In the rest of the landscape, the OCP education team recorded video clips on the impact of the mining in the Niania-Bayenga sector and land use issues within the Reserve, which were used to produce films on these subjects for use in education programs. The education team also continued to organize school conferences in the Mambasa-Byakato sector. An environmental seminar was held in Isiro on the Ituri landscape and DRC World Heritage Sites with 130 participants from different public services and organizations of Haut-Uele District.



A special meeting was organized with military officials in Mambasa to familiarize them with Okapi Wildlife Reserve regulations and to discuss ongoing threats of illegal hunting and ivory trade.

#### **Public awareness**

- The OCP education team produced and distributed copies of conservation laws, conservation lesson brochures, and OWR posters to villages between Mambasa and Byakato.



- Epulu hosted school visits of 35 students from Tourism School in Butembo and 70 students from Maendeleo Secondary school in Oicha.

- The Education team organized radio programs at Radio CANDIP in Bunia, Radio AMKENI in Mambasa and Radio NEPOKO in Wamba to discuss conservation education programs of the Okapi Wildlife Reserve including the topics: world heritage site, climate change and the Ituri-Epulu-Aru conservation landscape.

- 1300 Okapi Wildlife Reserve calendars were produced and distributed.

#### **Community Assistance**

- Two evaluation sessions were conducted with primary school directors and inspectors regarding health and conservation chapters in the national school curriculum.

- Conservation conferences were organized in 40 secondary schools around the Okapi Wildlife Reserve, including those situated between Mambasa and Byakato. Two secondary schools from Butembo and Oicha and one high school from Beni visited the Epulu Station.



For the first time, specific conservation education sessions were held targeting 127 women in the villages situated along the RN4 (main route through OWR) on their role in sustainable utilization of natural resources. Members of the women's associations (80) based in Wamba, Niania, Epulu and Mambasa received assistance from the project including uniforms, bean seeds and sewing material.

#### **Cane Rat Breeding**

The cane rat program has been reduced due to budget constraints in 2010. The last remaining cane rats under OCP care were distributed to various farmer collaborators in Epulu and Mambasa in February. However, the cane rat sites are still being maintained. Farmers in Mambasa are still engaged and are continuing with the program as an association.

#### Agro-Forestry

The agro-forestry program was reduced in scope this year due to budget constraints but the ago-forestry team continued their work focusing on nursery production, demonstration gardens in villages, and community extension services. The total number of farmers benefitting in 2010 was 180 including 198 hectares of farm acreage under agro-forestry management. Four agroforestry 1 hectare community fields of cassava (MDI variety) were established, three in agriculture zones in Bapukeli, Molokay and Ekwe (in the Reserve) and the fourth plot located outside the Reserve at Kero-Zanzibar.



Agroforestry plot with nitrogen-fixing trees

Demonstration garden with new disease-resistant cassava

- Reforestation by the team now includes over 20,000 trees.

- In the Mambasa nursery 4000 seedlings were distributed of the 5000 seedlings which were grown. In the Epulu nursery 450 new fruiting trees *Garcinia cola* were started.

- The agro-forestry program focused on the initiation of 4 (1ha) community fields in the villages of Bapukeli, Molokay, Ekwe and Kerozanzibar.

- To help reclaim fallow ground produced through slash and burn agricultural practices, trees were produced at the OCP tree nurseries using forest tree seeds. The resulting seedlings were transplanted by the agroforestry team into farmers' plots, as to their interest and participation with the reforestation project.

- The team distributed seeds and equipment to farmers including rice (1300 kg), peanut (276 kg), beans (300 kg), corn (100 kg), cassava stems (22m), assorted vegetables (5kg), agrarian tools (150 hoes, 175 machetes, 170 files, 8 axes, 8 spades).

- We continue to evaluate the new varieties of cassava being grown in gardens and distributed to farmers. The yellow cassava (MDI variety) has shown good results with no disease and 3m high after 3 months.

#### **Okapi Care and Husbandry**



The okapi care staff continue to care and feed the 13 okapi at the station which receive 29 to 35 species of leaves per day and gathered year round by Mbuti pygmies working with the OCP. In 2010 we reinstated the breeding program with the animals in Epulu introducing male okapi Issa to female Tayari and male Kijana to female Tatu, who we hope are both now pregnant and due to give birth in 2011.

Male okapi Shangala died in January 2010 of unknown causes, but probably old age related (estimated 30 years old). He was captured in February 1988 and had been a productive member of the okapi ambassador program in Epulu, being viewed and photographed by 1000's of visitors to Epulu during his years there. He was an excellent ambassador for the okapi, a true and charismatic endemic and resident of the Ituri Forest.

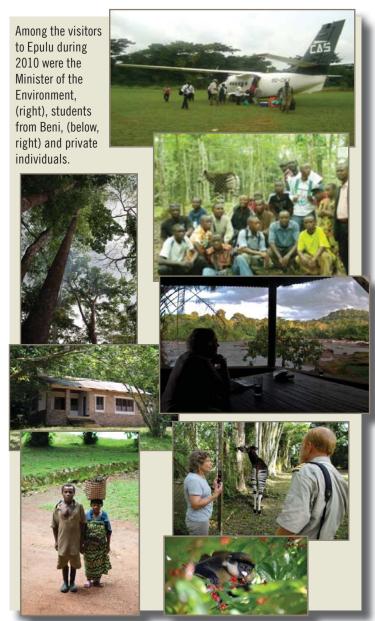
A small project was initiated to observe the degradation of okapi feces in the forest (by rain, insects, etc). This project will provide information on the quality of okapi fecal collections during wildlife and ranger surveys in the forest in 2011. The okapi fecal collections will be used in okapi DNA studies for the Okapi Wildlife Reserve performed by Dave Stanton of Cardiff University.

The okapi team worked in collaboration with the Zoological Society London (ZSL) for detecting okapis by camera - trap. This included forest training sessions for OCP staff on how to operate, set and monitor camera traps for okapi.



#### Tourism

The OCP supervised tourism and maintained existing infrastructures for ICCN, including guesthouse, bungalows and the tourist information center. Tourist activities included guided tours, forest walks and visits to nearby Mbuti pygmy camps. In 2010 3089 people visited the okapi and tour center of which 2693 were Congolese residents and 396 were international guests and tourists.



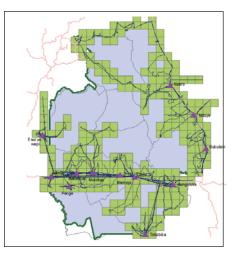
### ICCN / Okapi Wildlife Reserve Surveillance

### **Patrol Efforts**

Month	# Patrols	# days	# overnight	Total distance (Km)	Average distance patrol	Average # guard/patrol
October	50	197	147	1941,04	38,82	2
November	53	173	120	2106,32	39,74	2
December	45	125	80	1970,76	43,79	2
Total	147	495	347	6018.12	40,85	2
Quarter 3	154	478	324	6313	4 0	2

Table 1. Number and average of patrols, 4th quarter 2010

Map. 1. Covered sectors (green squares) quarter 4 (patrol posts purple triangles). Covered sectors are estimated to +55% of the total area of the OWR. They include buffer zones to prevent intrusion of new poachers and miners.



### **Illegal Activities**

Table 2. Frequency of illegal activities

Threats	Illegal activities	#	Frequency/km	Frequency/ km/day
	Crossfire	2	0,00033	0,00015
	Poacher camps	78	0,01299	0,0105
	Illegal movement	3	0,00049	0,00111
Other human evidence	Traders	3	0,00049	0,00047
	Armed	3	0,00049	0
	Hunters	188	0,03131	0,0105
	Fishermen	2	0,00033	0
	Wire Snares	30	0,00499	0,00732
Poaching	Nylon Snares	4076	0,68	0,42
Wood collection	Construction Wood	15	0,00249	0,00222
	Mining camp	4	0,00066	0,00015
Mining	Extraction	3	0,00049	0,00175
5	Miners	17	0.002831	0,002388

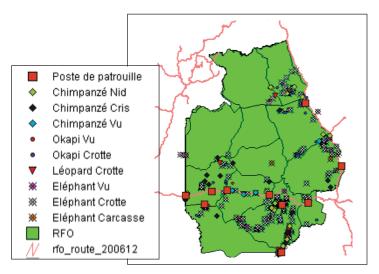
Nylon snare traps were found in all covered sectors. Moreover, intense poaching was recorded in Southwest (Maroc), where crossfire led to the death of 2 rangers. Three guns and 204 rounds of ammunition were confiscated, 4076 nylon traps and 30 wire traps were dismantled, 63 poacher camps and 4 mining camps were destroyed. Few mining camps were active. Compared to quarter 3, armed poaching and mining increased from 33% to 67%.

### **Fauna Observations**

Species	Sign of observation	Number	Frequency /Km quarter 4
	Sound	22	0.00363
	Nest	23	0.00379
Chimpanzee	Seen	29	0.00478
	Carcass	2	0.00033
	Feces	267	0,04405
Elephant	Seen	21	0,00346
	Feces	9	0.00148
Leopard	Seen	0	0
	Feces	35	0,00577
Okapi	Seen	8	0,00132

Observation of key large mammal species

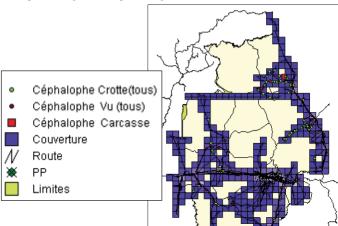
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Distribution of signs of presence, 4th quarter patrols Elephants are more concentrated in the Southwest of the Reserve (Tito, Badengaido and Enjewa), where armed poaching and trap setting have increased.

Observation of duikers

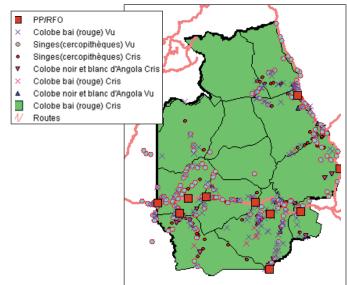
Species	Sign of observation	Number	Frequency per Km
	Feces	4	0.00066
Water Chevrotain	Seen	10	0.00165
	Feces	28	0.00462
Bleu duiker	Seen	13	0.00214
	Feces	25	0.00412
Red duiker	Seen	20	0,00033
	Feces	17	0.0028
Yellow-backed duiker	Seen	3	0,00049



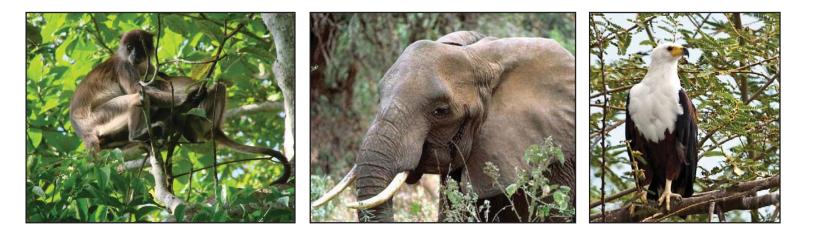
Distribution of Distribution of duikers, 4th quarter patrols The blue duiker is the most observed in the Reserve even though it remains the most hunted by the local communi ties for food and bushmeat.

Observation of primates

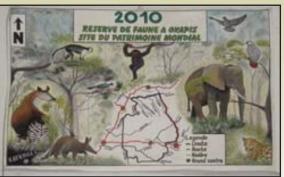
Observation of primates				
Species	Sign of observation	Number	Frequency/km	
Red colobus	Sound	16	0,00264	
Red colobus	Seen	2528	0,42	
Angolan colobus	Sound	4	0,00066	
Angolan colobus	Seen	226	0,03729	
Monkeys (cercopithecus)	Sound	97	0,016	
Monkeys (cercopithecus)	Seen	1633	0,27	



Distribution of monkeys and colobus, 4th quarter patrols







Sample of 2010 calendar that was distributed around the Reserve.



We would like to express our thanks to the zoos of the global okapi conservation community and our individual donors, who contributed to the Okapi Conservation Project in 2010. Please know that the okapi, wildlife, and people of the Ituri Forest depend on our help and are surviving because you care.

### **Okapi EEP and Okapi SSP Zoo Partners**

Antwerp Zoo	4,975.00
Cheyenne Mountain Zoo	3,000.00
Cincinnati Zoo and Botanical Garden	2,500.00
Columbus Zoo and Aquarium	14,670.00
Copenhagen Zoo	5,970.00
Dallas Zoological Society	5,000.00
Denver Zoo Foundation	2,500.00
Forth Worth Zoo	100,000.00
Greater Los Angeles Zoo Association	5,000.00
Houston Zoo, Inc.	5,000.00
Koln Zoo	5,000.00
Leipzig Zoo	6,771.50
Lowry Park Zoo	5,000.00
The Maryland Zoo in Baltimore	4,000.00
North of England Zoological Society	5,000.00
Omaha's Henry Doorly Zoo	4,000.00
Saint Louis Zoo	5,000.00
San Antonio Zoo	3,000.00
San Diego Zoo Global	5,000.00
Tokyo Zoological Park Society	5,000.00
Wilhelma Zoo (Stuttgart)	4,975.00
Zoologischer Garten Basel	10,000.00
Zoological Garten Berlin	6,889.00
Zoological Garden Dvur Karlove	6,227.89
Zoological Parc de Beauval	4,948.80
Zoological Society of Philadelphia	150.00
Zoorasia	10,000.00

### **Individual Donors**

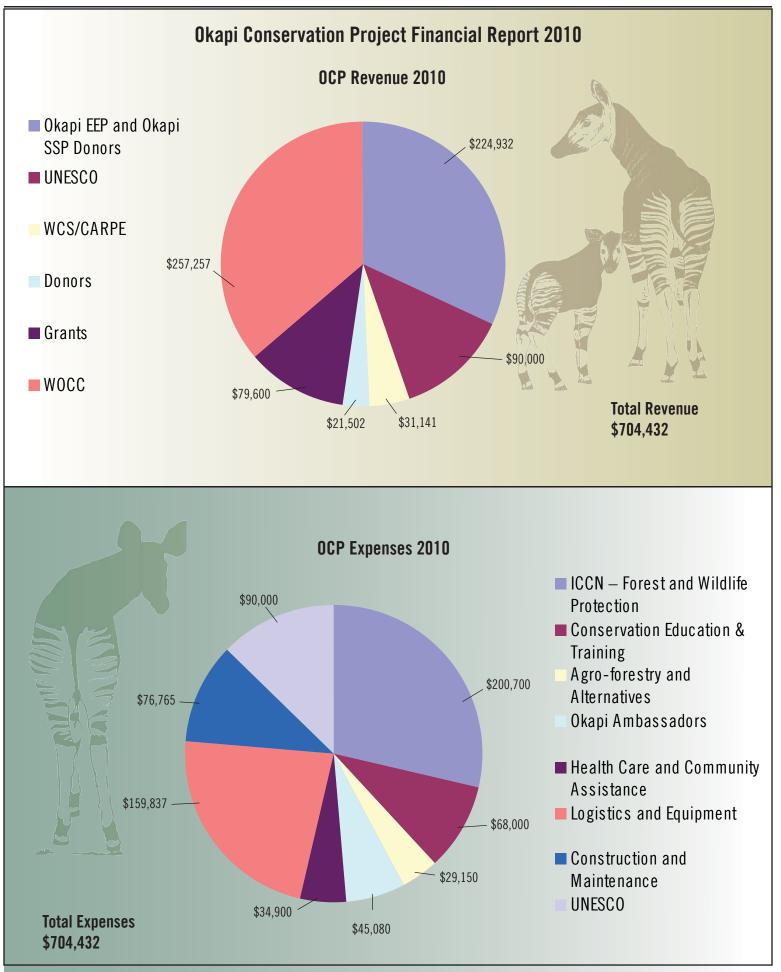
AAZK Columbus Chapter	1,556.00
Deborah Ames	35.00
Bridget A. Byrne	500.00
Nancy G. Bugman	100.00
Heather Carpenter	125.00
David and Jennifer Faure	5.00
James and Cynthia Vaughn	300.00
Marsha Vaughn	6,002.00
Steven Vaughn	200.00
Susan Ford	147.00
Jane McEvoy	100.00
Kenji Ishiwada	250.00
Stephanie Mizer	25.00
Lori Monska	140.00
Andrew & Shannon Parrott	70.00
Jessica Pownall	25.00
George Rabb	3,000.00
Global Giving	3,947.00

### **Foundations and Agencies**

Theo Westenberger Estate	220,000.00
US Fish and Wildlife Service	47,100.00
UNESCO	90,000.00
Wildlife Conservation Network	44,297.50
Wildlife Conservation Society/CARPE	31,141.00
Mohamed bin Zayed Species Conservation	25,000.00
Silicon Valley Com Fund	7,500.00







## Okapi Conservation Project Annual Report 2010

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