



# KARATASI



## HAND-RAISING AT ITS BEST

In January of this year, a young male white rhino was born into the herd at White Oak Conservation Center. Three days later, he showed signs of distress in the cold weather and the decision was made to pull him into the hospital to save his life. After a thorough assessment by the veterinary staff, it was determined that he would need to stay in the hospital for several weeks so that he could be monitored closely and supported through various medications and fluids. The calf was weaned over to a bottle and the long process of hand raising him began.

After many weeks, the calf had not only recovered, but he was now thriving, gaining up to 10 lbs. a day on a formula made from lowfat and nonfat cow's milk mixed with dextrose, rice cereal for infants and lactaid.

In March, the calf, now called "George", was placed in a pen across from the rhino herd. Later, he was introduced to "Crash", a 3-year-old male from Busch Gardens in Tampa, and they became companions. In October, Crash and George were slowly introduced into the white rhino herd where they now live. Throughout all this time, George continued to nurse from a bottle offered by the keepers several times a day. To date, he drinks 10 gallons of his special formula each day! And even though he still comes up for his milk offerings, George is slowly incorporating himself into the herd, learning to be a rhino more and more each day.

Even though the staff at the Conservation Center seldom needs to intervene in the care of babies, it is always satisfying when those under their care seem to thrive and more importantly, are successfully re-integrated into their groups or herds. It is hoped that George will one day be a vital part of the ongoing breeding program for white rhinos at White Oak and in the U.S.

*When George was first brought to the hospital, he weighed 100 lbs. He quickly gained weight on the formula of milk, rice cereal, dextrose and lactaid. Currently, George is going through 70 gallons of milk a week.*



*Before George was introduced to Crash, he lived for a short time in an outside enclosure to get him acclimated to the temperatures and environment after his time in the hospital.*

*George, center, and Crash, lower left, now live with the rhino herd full time. George still comes up for his bottle, but he is now eating more grass and hay, due in part from the influence of Crash and the other rhinos in the herd.*



# From the Shed

by John Lukas

It is important at the end of the year to look back and reflect on the results of all of our efforts. We started off the year hand raising an okapi calf and a white rhino calf and are ending the year hand raising two cheetah cubs. Although we typically do not need to hand rear animals at White Oak Conservation Center, this year presented us with the 'first time' need to step in and raise two species that have not previously needed our assistance; okapi and white rhino.

Hand rearing is an unusual event here at the Center and usually is brought on by maternal health issues. The overall goal of hand raising is to rear healthy animals that are socially adaptable. We make every effort to get the youngsters out with their own kind as soon as possible so they grow up knowing what they are and are able to interact normally and breed with conspecifics. The cover story of this issue of *Karatasi* demonstrates how well 'George' is integrating into the white rhino herd and by the progress he is making we can safely assume that one day he will sire many calves over his lifetime.

Sometimes, as in the case with Florida panthers, we have to raise orphans with a hands-off, non-intrusive approach. If animals are returning to the wild (especially predators) every effort must be made to avoid an association between people and food and have them actually develop a strong distrust of people. At the end of November we sent a male panther that came here as a young orphan, and spent over one year with us, back to south Florida where he was released near his capture site in the Big Cypress National Preserve.

We follow a strict protocol for care of wild panthers that has been developed over years and has allowed us to repatriate ten panthers to the wild with 100% success. We recently received brother and sister orphan panthers which have just started the conditioning process for return to the wild sometime in 2012. One of the most satisfying feelings for people who work with wild animals is when an animal can return to the wild and live life as nature intended.


We celebrated several milestones this year; we sent five Mississippi sandhill cranes hatched at the Conservation Center to the Mississippi Sandhill Crane Refuge making a total of 38 cranes from here going in bolster the population of wild birds in Mississippi. Our first ever Indian rhino was born this summer and four maned wolf pups were born a few weeks ago.

We sadly said goodbye to 'Harapan' the Sumatran rhino. He went to live at the Los Angeles Zoo where the browse species he likes and needs grows wild and is easily collected by staff. We previously had to fly in browse from San Diego twice a week, at great costs, and the arrangement makes sense for all involved.

In addition to a very successful year for the animal programs, we had three young animal care attendants from our staff leave us to go on to graduate school, after which I know they will make conservation of wildlife a focus of their lives.

I want to thank all the staff at White Oak, our dedicated volunteers and most importantly the Howard Gilman Foundation and all of our donors that make our progress possible. Conservation requires a long-term commitment of time, resources and talent to see results. Having so many friends makes it possible for us to make steady progress in conserving some of the rarest animals on the planet.

From all of us here at White Oak, people and animals alike, we wish you a happy and safe holiday season.

  
President

**White Oak Conservation Center**  
conserves and sustains some of the earth's rarest wild animals through innovative breeding, training, research, education and field programs that contribute to the survival of wildlife in nature.

### **Conservation Staff**

Tim Callahan, Scott Citino,  
Laura Elder, Wayne Hemphill,  
John Lukas, Mary A. Minotis,  
Susan Murphy, Marcie Oliva,  
Amy Perry, Linda Penfold,  
Meredith Picray, Tim President,  
Frank Roberts, Jonathan Rolfs,  
Stephanie Rutan, Andrew Schumann,  
Steve Shurter, Brandon Speeg,  
Vickie Steele, Mike Taylor,  
Sophia Tribuzio, Scotty Wade,  
Karen Ziegler-Meeks.

### **White Oak Conservation Center**

581705 White Oak Road  
Yulee, Florida 32097-2169  
Phone: (904) 225-3396  
Fax: (904) 225-3395  
email - [info@wogilman.com](mailto:info@wogilman.com)  
website - [www.whiteoakconservation.org](http://www.whiteoakconservation.org)

### **Contributors to this issue include:**

John Lukas, Diana Citino,  
Linda Penfold,  
Stephanie Rutan,  
Steve Shurter, Karen Ziegler-Meeks

**KARATASI** means paper  
in Swahili; recognizing the early  
catalytic support from  
Howard Gilman &  
Gilman Paper Company  
for wildlife conservation.



## White Oak Conservation Center's Training in Research Comes Full Circle

From 2004 through 2010, White Oak Conservation Center has provided motivated, talented students with the opportunity to participate in conservation research by offering a Research Internship. In this position, interns learned enzyme immunoassay techniques for hormone analysis; semen collection, analysis, and freezing techniques; and in vitro fertilization and embryo development techniques for endangered species. Interns participated in animal care and management procedures, and they developed skills for grant and manuscript writing, delivering oral presentations, developing and implementing research projects, and critically evaluating published research papers. In the end, with published research manuscripts on their resume, knowledge in their brains, and a network of contacts in the conservation community, interns were very well-positioned to gain admission to graduate schools and dream-jobs (*See table below*).

Intern	Years	Post-Internship Position
Martine de Wit, DVM	2004-2006	Manatee Pathologist, Florida Fish & Wildlife
Lara Metrione, MS	2006-2008	Doctoral Candidate, The Ohio State University
Adres Rojas, DVM	2008-2009	Master's Student, Mexico City University
Serena Barnes	2009-2011	Doctoral Candidate, University of Melbourne, Australia

This year, White Oak became a founding member institution of the South-East Zoo Alliance for Reproduction and Conservation (SEZARC). SEZARC is a consortium of zoos and conservation centers that focus on solutions to the reproductive challenges that face endangered species in captivity and in the wild. These solutions often require careful description of the problem through reproductive and endocrine assessments, strategic planning that considers both animal health and the logistics of animal management, and implementation of reproductive management plans and state-of-the-art reproductive therapies. In short, SEZARC needs researchers that have exactly the kind of training that a former White Oak Research Intern has. To that end, White Oak has supported a postdoctoral fellow, Dr. Lara Metrione, for SEZARC during 2011.

Lara first came to White Oak in 2004 as a guest researcher, studying white rhinoceros behavior and reproduction. As the White Oak Research Intern, she studied reproductive seasonality in Jackson's hartebeest, contraception of flying foxes, and reproductive endocrinology in a multitude of other species. During her PhD, Lara again returned to the world of white rhinos. Her research, in which White Oak was a key participant, described the environment and behavior associated with successful reproduction and estrous cycles in white rhinos, who are notoriously difficult to breed in

captivity. As the SEZARC/WOCC Postdoctoral Fellow, Lara runs the White Oak enzyme immunoassay laboratory and assists Dr. Linda Penfold with SEZARC research projects and case studies. Lara also helps to manage the requests of other researchers who wish to conduct projects in association with White Oak. And what of her work with white rhinos? Naturally, Lara has another project on the horizon, and it will examine white rhino behavior and genetics and their possible implications for reproductive decisions in white rhinos.



*Dr. Lara Metrione, a post-doctoral fellow, has returned to White Oak to assist Dr. Linda Penfold and to run the enzyme immunoassay laboratory. She first came to White Oak as a guest researcher, studying white rhinos behavior and reproduction. (below) That experience led her to continue her studies of white rhinos during her PhD.*



*Serena Barnes, above left, talks to participants in the Envirovet program about the EIA lab at White Oak during her internship. Serena is now a Doctoral candidate at the University of Melbourne in Australia.*

## White Oak Conservation Center Field Programs...

**F**ield programs are an important component of White Oak Conservation Center (WOCC), working with local partners to conserve wild animal populations and their habitats. Our ability to facilitate and focus training and capacity building, education, research and wildlife protection efforts results in significant impact and effective species conservation in the regions where we work. The following article is an excerpt from the biannual Okapi Conservation Project Update, published and distributed by WOCC.

### The Okapi Conservation Project

#### Meet the OCP Staff

The Assistant Director of the Okapi Conservation Project is Marcel Enckoto (left in photo), a Congolese national born in eastern DR Congo. Marcel has been working for the Okapi Conservation Project since July 1990 after receiving his degree in Human Sciences (Linguistics and Psychology). He is married with 4 children, who go to school in Butembo, DRC. Marcel feels the okapi is important as a scientifically unique species and has worked nearly his entire life to ensure its protection. He enjoys speaking with and education people, both nationally and internationally about conservation. It takes great courage to tackle the big challenges of traveling around the Okapi Wildlife Reserve to teach about conservation while dealing with major issues like poor roads, poverty, political instability and persistent illegal activities.



#### Agro-forestry Update

The Agro-forestry team continues to work with farmers around the OWR. Gathering seeds and planting and transferring seedlings take up a large portion of our efforts. As nitrogen fixing leguminous plants, Leucena and Calliandra seedlings form the important basis for farmer's plots and are the first trees planted to restore the soil in preparation for planting vegetables and food items. Both can also be used for fuel wood as they grow larger. The team also distributed fruit tree seedlings for farmers, for a total of 7514 trees distributed and planted in the last quarter. African Mosaic Disease in cassava plants causes serious problems for subsistence farmers in the region who depend on the cassava as a staple. Our team is helping to distribute and study disease modified strains of cassava for farmers participating in the program and four community fields of disease resistant cassava were recently established.

#### Okapi Wildlife Reserve – Institute in Congo for Conservation of Nature (ICCN)

The ICCN Okapi Wildlife Reserve is managed by ICCN Director J.J. Mapilanga with the help of Conservator Principal (Warden) Gishlain Somba. They oversee the 110 Okapi Wildlife Reserve rangers and

manage the wildlife protection and security in the Okapi Wildlife Reserve, research projects, community conservation programs, and work in close partnership with the Okapi Conservation Project.

#### A Lifeline in the Bush

One of the OCP's responsibilities is to maintain Epulu's grass airstrip, our connection with the outside world, for project personnel, tourists, officials and dignitaries. It is also a lifeline in the event of emergencies, where critically ill patients can be flown to hospitals in larger nearby cities, or for evacuation in the event of dangerous civil unrest. The strip requires critical maintenance so that airplanes can safely land and disembark. A thankless job, this involves a work crew who cut the incessant growth of the 1200m by 60m patch of grass, which the forest constantly tries to retake. The crew also has to keep the airstrip clear of grazing goats and soccer playing children when planes are trying to land!



#### Unrest in the Okapi Wildlife Reserve

The pressure to exploit the natural resources of the DR Congo continues, with the high price of gold, diamonds, coltan, ivory and timber driving illegal activities. Reports of ivory being purchased in Kisangani for \$200 per kg for export provide ample motivation for poachers to risk their lives to enter the Okapi Wildlife Reserve. Gold mining has become more lucrative and Chinese companies using motorized equipment are dredging and extracting on the Ituri River, which is the southern border of the Okapi Wildlife Reserve. Bushmeat has become a valuable secondary byproduct as crews extracting timber or gold, or pursuing elephant ivory, are also hunting antelope, primates and okapi.

This trade is driven in part by the extensive Asian influence in the DR Congo, and recent CITES reports indicate the problem is widespread across Africa, as the Chinese increase their economic relations with poor African countries. Like the DRC, these countries generally have poor infrastructure to protect their natural resources and rely heavily on western donor agencies and NGO's to support environmental protection initiatives.

The Okapi Wildlife Reserve has seen a significant increase in organized illegal mining and ivory poaching which has become a serious concern for the ICCN. In their efforts to maintain the integrity of the OWR, ICCN wardens and rangers have expanded their efforts, working with local populations and lobbying government officials to help control the illegal activities. This is a double edged sword as often times government and army personnel are involved in the actions.

Because of the limited number of rangers on patrol in the vast OWR, ICCN often relies on mixed operations with the DR Congo Army to help with large or dangerous poaching or mining camps. The southwestern sector, adjacent to the potentially rich Ituri River gold deposits, has been a hotspot of late and several operations have been conducted there in the last year. These operations often result in firefights, arrests and even deaths both to poachers and rangers. The Okapi Conservation Project is pooling our resources with other NGOs to both support the operations and lobby for political intervention at the highest levels of the DR Congo administration.

#### Patrol Results:

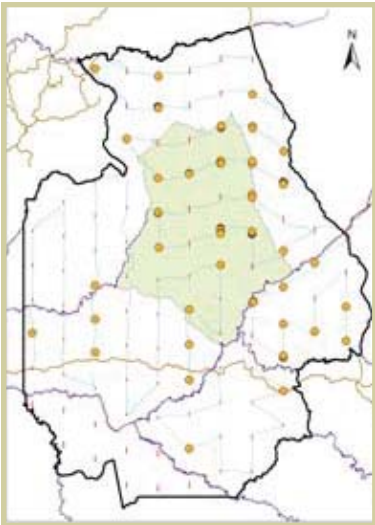
During the second quarter of 2011 Okapi Wildlife Reserve rangers made 179 patrols representing 377 ranger days covering 6,086 km, mostly on foot. During the patrols the rangers arrested 11 poachers and 13 miners and released 53 hunters and 39 miners. They confiscated 5 guns, 110 pieces of ivory, 56 shovels for gold extraction and picked up 1237 wire and nylon snares. While on patrol OWR rangers saw 9 okapi, 44 forest elephants and 17 chimpanzees.

#### How many okapi live in the Okapi Wildlife Reserve?

In 2011 wildlife populations in the Okapi Wildlife Reserve (OWR) were surveyed through a project organized by the Wildlife Conservation Society with support by a team from the Zoological Society of London working in the DR Congo. Most of the Reserve was surveyed through a series of foot transects, a significant and challenging accomplishment for the team. In addition to okapi, the team also looked for elephant, chimpanzees and other primates, antelope, and human sign and activities. One rarely has the chance to see okapi in the forest, so the surveys rely on tracks and scat counts observed along transects and then extrapolated to the OWR's entire 13,760 km<sup>2</sup>. While this method is not as accurate as actual sightings, by using the same methodology as in previous

surveys (1996, 2003) we get an appreciation of the changes in population densities for these key wildlife species. The survey report has not been completed but the map gives a preliminary indication of okapi densities in the OWR.

*WCS okapi survey 2011. Bold dots indicate heaviest densities. The southern sector was not completely surveyed. The central area outlined in yellow is the core sector of the Reserve where no hunting or human use is allowed.*



#### Okapi Wildlife Reserve Infrastructure

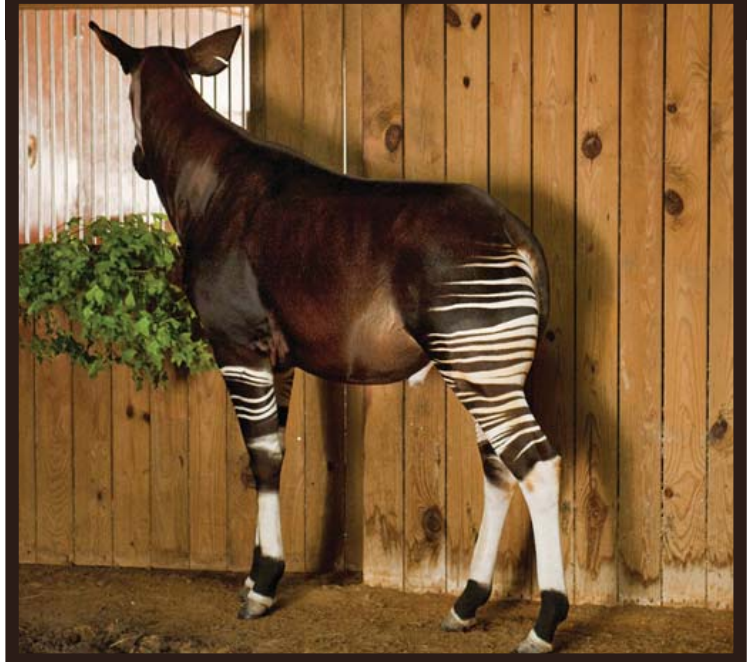
The Okapi Conservation Project is initiating a second project for the construction of permanent ranger housing at the Zunguluka Patrol Post located on the main road of the eastern border to the Okapi Wildlife Reserve. This patrol post is a critical entry and exit point for all vehicle and pedestrian traffic through the Okapi Wildlife Reserve, as well as a base for forest patrols in the eastern portion of the Reserve. This project will construct housing for rangers and their families in support of their wildlife protection work in OWR. The project is possible through a grant from the US Fish and Wildlife Service African Elephant Fund – Wildlife Without Borders.



*In November, ICCN Director for the Okapi Wildlife Reserve, JJ Mapilanga visited White Oak Conservation Center. While here, he attended the International Okapi Management Meeting co-hosted by White Oak Conservation Center and the Jacksonville Zoo.*

Last year White Oak Conservation Center hosted Joel Sartore, author and renowned National Geographic photographer. Mr. Sartore helped organize a brief article in the October 2011 National Geographic featuring a photo of male okapi "Romakari" at White Oak Conservation Center (below).

This most famous okapi was born in Epulu in 1989 and was transported to White Oak in 1991 where he currently resides and has sired 25 offspring.



<http://www.facebook.com/okapiconservationproject>



<http://twitter.com/okapiproject>



<http://okapiconservationproject.blogspot.com/>

## Karen Meeks Wins the Theo Westenberger Photography Award for Wildlife

In celebration of the life and work of Theo Westenberger, a gift was made to support the efforts and mission of White Oak Conservation Center. The first annual photography award was created to embody the fun and innovative approach that Theo demonstrated in her life, work and philanthropy. The contest was open to all paid and volunteer staff and family members of the Conservation Center. Photos were judged on originality, composition, overall impact and artistic merit. Award-winning wildlife photographer John Reed judged the contest. The winner received \$1000 that will be directed on their behalf to any established WOCC program of their choice.



Karen Zeigler Meeks, Animal Collections Manager, has been photographing the species at White Oak for many years. Her photo of a Somali wild ass and foal was chosen from an impressive group of photos submitted by White Oak staff. The winning photo will be made into note cards and sold at the gift shop at the Conservation Center.

*Theo Westenberger was an award-winning photographer who was known for her versatility with many portraits and travel images, which won her recognition as a top magazine and advertising photographer. She died in 2008 at the age of 57.*

Congratulations Karen!



*Karen's photo of a Somali wild ass mare and her foal (right) was chosen by John Reed for capturing the beauty of White Oak, which to him meant "an emphasis on conservation and good work helping breeds and species in need". Mr. Reed commented that it was a difficult choice since there were so many good photos (below).*



## Two New Temporary Residents



On September 22<sup>nd</sup>, agents from the Florida Fish and Wildlife Conservation Commission recovered two 4 ½ month old Florida panther cubs from the wild in south Florida after their mother died of undetermined causes two weeks earlier. The cubs were flown to St. Marys, GA, near White Oak, by Ralph Arwood, a volunteer for Big Cypress National Preserve in his personal plane.

The cubs were placed in a remote holding area at White Oak and provided with quality care. They were underweight when they arrived due to the fact that they had been without maternal care for up to two weeks.

Once the cubs are ready, they will be placed in our conditioning pen for rehabilitation. Currently the enclosure has a one-year-old male that will be returned to the wild this fall. (see cover article in the Summer 2011 edition of **Karatasi**).

## Kings Bay Comes to White Oak

The volunteers at White Oak Conservation Center have become an integral part of our everyday operations.



Besides our individual volunteers in the animal areas and the tour department, groups of military personnel from Kings Bay Naval Submarine Base in nearby Kings Bay, GA, have volunteered to help with big projects such as raking alleyways, (*left*) picking up tree limbs and debris in animal pens and even unloading hay trucks!

As of November 16<sup>th</sup>, 89 active duty sailors, marines and Coast Guard personnel have volunteered at the Conservation Center, contributing 1,016 hours of their time.

**We thank our volunteers for their selfless contributions!**

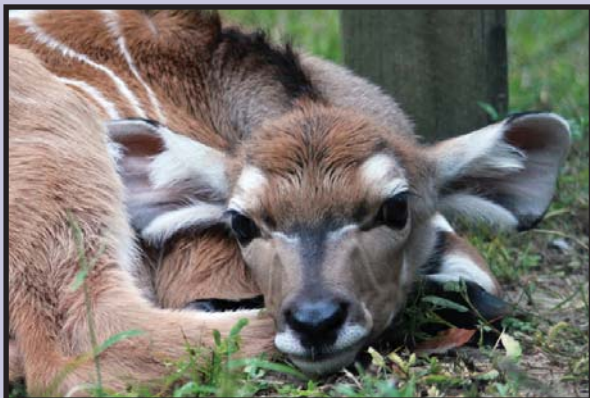
*To learn more about becoming a volunteer, visit our website or contact Sue Murphy at 904-225-3316*



**Season's Greetings  
from everyone at  
White Oak Conservation Center!**



## White Oak Conservation Center New Arrivals June 2011 - December 2011



*One of seven giant eland calves born  
this summer.*



*Three of four maned wolf pups  
born this fall*



*One of two  
cheetah cubs  
born in  
November*



*One of seven Somali wild ass born this year*

---

Past issues of Karatasi are available on our website at [www.whiteoakconservation.org](http://www.whiteoakconservation.org)  
You can help reduce costs and conserve environmental resources by opting to receive the Karatasi by e-mail only.  
Please send your requests to [StephanieR@wogilman.com](mailto:StephanieR@wogilman.com). We appreciate your consideration.