



## **Amboseli Trust for Elephants Amboseli Elephant Research Project Report for 2005**

### **AMBOSELI NATIONAL PARK**

The situation in Amboseli National Park, which is the base for the Elephant Trust's research and conservation work on elephants, is unresolved. On September 29, by a decree signed by the Minister of Wildlife and Tourism, Amboseli National Park's status as a National Park was revoked and it was downgraded to a National Reserve to be run by the local government, the Olkejuado County Council.

In effect this means that the County Council would run and staff the Reserve. All gate receipts and other revenue would go to the County Council instead of Kenya Wildlife Service (KWS) which operates the National Parks. The rules and regulations for Reserves are far more flexible regarding human activities within the boundaries, whereas conservation and tourism are supposed to be the only activities within National Parks.

There was an immediate and sustained public outcry against this action both within Kenya and internationally. One group of conservation organizations, led by the East African Wild Life Society, have brought a court case which is still pending. There have been several "mentions" of the case and now a hearing date has been set for February 7, 2006. They claim that the change of status was made illegally. According to the Wildlife Conservation and Management Act, notification of de-gazettement has to be posted in the Kenya Government Gazette and in a national newspaper, then there has to be a period of 60 days for discussion, and finally it has to be passed by Parliament. None of these actions was taken. However, on October 11, the Olkejuado County Council ran a full page ad explaining their position. According to their lawyers the original take-over of Amboseli in 1974 was illegal and unconstitutional and therefore by giving Amboseli back to the County Council the government is simply redressing a wrong.

We do not know what the final decision of the court will be and we find ourselves caught between two points of view. On the one hand, it is always a loss to conservation to have a protected area change to a status that legally affords it less protection. Amboseli is a very rich and important ecosystem, but it cannot survive under heavy use by both people and wildlife. On the other hand, there are National Reserves that have been in existence in Kenya for many years. It is not a new concept for a local community to be in charge of a conservation area and the concept is, theoretically, a good one. There is no reason why Amboseli could not become a model of a well-run National Reserve. There are, however,



*Kilimanjaro from the center of Amboseli*



*Amboseli Maasai at a recent ceremony*

many pitfalls to be aware of. We hope that the lessons learned of mistakes and successes made in other community conservation areas will help inform the people of Amboseli. (For more details see the October news flash.

We have always felt that the Maasai around Amboseli were side-lined and in many ways were treated unfairly when the National Park was first created (also by presidential decree) in 1974. We have long argued that they should be receiving far more benefits than they do in compensation for living in such close proximity to large dangerous wild animals.

Whatever the outcome of the court case, we hope to continue to work closely with the Maasai in assuring that they benefit from living with wildlife.

Even with our limited funds we have been able to help the Maasai in several ways:

- we started the livestock consolation scheme in 1997 which pays for cattle, sheep and goats killed by elephants;
- we pay scholarships and living expenses for Maasai students from Amboseli to attend university;
- we pay the bursaries for girls to go to secondary school;
- we employ eight research scouts, a Maasai liaison officer, camp workers, and research assistants from the local community;
- we have helped local people find jobs in tourism and wildlife;
- our Project Manager is a vital member of several committees set up to deal with Maasai issues;
- we have a major project on trying to find ways to alleviate human-elephant conflict in the areas where Maasai have started to farm; and
- we are participating in planning for ways and means to generate payments for ecosystem services to the local communities.



*The EB family drinking*

## NEWS OF THE ELEPHANTS

The Amboseli ecosystem got average rainfall during the “long rains” but so far the “short rains” have proved to be meagre. We are hoping there will be some rain between now and March or April when the long rains are due. If there is none we will have a drought once again and this will be the fourth year of lower than average rainfall.

The Amboseli population hit a new milestone. It now numbers over 1400 consisting of 469 adult (over 10 years old) females, 345 adult males, and 600 calves of both sexes. Amazingly there are 15 females over 60 years old and 34 males 40 and older. Males do not have such a long life expectancy as females because of poaching, hunting and fights. Life expectancy for Amboseli females is 41 while it is only 24 for males.

This year we lost one of the oldest and most successful bulls in Amboseli, **Masaku**, who died as a result of a fight with a younger bull. Masaku was 60 years old and still coming into musth and obviously fighting with other males for access to females. We also lost the wondrous and terrifying **Bad Bull** who died after being shot with a poisoned arrow most likely when he was crop raiding. Bad Bull was estimated to be 66 years old. Thanks to donor support a few years ago we were able to keep Bad Bull from getting shot as a “problem animal” by fixing the fence around the Kimana farms. We don’t think it was in those farms that he was shot but rather in a relatively new unprotected area where crops are now being grown.

Both Masaku and Bad Bull had long and successful lives. The DNA study of paternity carried out by Julie Hollister-Smith from Duke University



*Two musth bulls fighting: serious injuries and death are rare*

showed that they fathered a good number of calves in Amboseli, so their genes are carrying on. An elephant bull doesn’t ask for much more than that. Although we’ve lost most of our big old bulls in the last few years there are some fantastic, gorgeous younger males coming up. With 34 males over 40 years old, Amboseli does not lack for breeding bulls.

The family groups are thriving and some are getting amazingly large with over 40 members. I always thought that families would split up when they numbered over about 30, but some are sticking together way above what I expected.

The most famous family in Amboseli, the EBs led by the beautiful **Echo**, is doing very well. Earlier in the year I spent two full weeks with the EB family because **Martyn Colbeck** was out in Amboseli again to do some more filming. Actually this time HE was being filmed. Working again with producer **Mike Birkhead**, the film, called “An Eye for an Elephant,” is

about Martyn and his amazing ability to film and photograph elephants. Of course, Martyn wanted to be filmed with the EBs so we spent a lot of time with them and it was a joy for us.

The family now numbers 29 and Martyn had to admit that he was having trouble keeping track of who was who, but he actually got it down by the end of the two weeks. The babies were particularly fun to be around. Echo and **Enid** both gave birth to new calves in January and these calves, both females, are inseparable. They have the best games.

Echo's 11-year-old daughter, **Ebony**, surprised us by giving birth in April when she was just a month short of 11. This is very young. The average age for a female to have her first calf is 14. Nevertheless, Ebony seems to be a great mother. Her male calf is full of energy and is very adventurous.

Erin's orphaned calves are doing remarkably well. Against all the odds **E-Mail** has survived and actually looks in good condition. He's now three years and 10 months old. If his mother were alive he would still be suckling, but he somehow manages to get enough food on his own. However, he's a very "serious" calf who rarely plays. His next oldest sister, **Erica**, is also fine but she also rarely plays and her demeanor is very subdued. It is a terrible tragedy for elephant calves to lose their mother.



*Ebony & her new calf only a few hours old*

## RESEARCH

The Amboseli Trust for Elephant's research component has been very productive. Two of the major projects were completed this year:

### DNA Project

Both **Beth Archie** and **Julie Hollister-Smith** completed their theses and recently received their PhDs from Duke University. Beth worked on genetic relatedness and behaviour of females and Julie studied paternity based on genetic analysis. They will be publishing a series of scientific papers.

### Maasai Attitudes Study

In July **Christine Browne-Nunez** completed her field work on the attitudes of the Maasai to elephants, other wildlife and conservation in general. She has now returned to the University of Florida to write her Ph.D. thesis. With the change of status for Amboseli it will be very interesting to do a before and after comparison of attitudes in a few years time.

### **Two new projects have started:**

#### Elephant Cognition

**Drs. Richard Byrne** and **Lucy Bates** from St. Andrew's University in Scotland have begun a study trying to get at how elephants think. They were just out in September for the first of their field work. However, most of their analysis will be based on the my field notes plus the field notes of **Joyce Poole** and research assistants **Soila Sayialel**, **Norah Njiraini** and **Katito Sayialel**. We always try to write down interesting

interactions and unusual behaviour and Dick and Lucy will be looking at this anecdotal material. They will also do some non-invasive experiments with the elephants. We're looking forward to seeing what they come up with.

### Male Development and Behaviour

**Patrick Chiyo** is our latest Duke University student. He will be studying the behaviour of young males with particular regard to how males become crop raiders. Patrick, who is from Uganda, just spent his first month in the field. He is back at Duke for a month refining his research plan and then will return to Amboseli for his field work.

### **Our ongoing research projects include:**

#### Long-term Monitoring

The research assistants continue to keep track of every individual in the population. Since the elephants are spending more and more time some distance outside the Park this becomes more difficult to achieve each year. We are actually very happy that the elephants are spreading out but we would still like to see them from time to time.

#### Vocalization and Communication

**Joyce Poole** continues her fascinating analysis of the repertoire of vocalizations of elephants. She now has recordings and descriptions of context for over 70 separate sounds that elephants make.

#### Growth

**Phyllis Lee** and **Cynthia Moss** have recently written a paper on the affects of drought on the early growth of calves. We have found that calves who undergo a drought in the first years of their lives are smaller throughout their lives and are less successful at reproducing.

#### Human Elephant Conflict

This project has now been operating for over one year and is making good progress. Headed by **Winnie Kiiru** and **John Kioko** and overseen by **Petter Granli**, it aims at finding appropriate and inexpensive ways to keep elephants out of farms. The team has been trying out simple early-warning devices such as ropes coated in evil-smelling substances and hung with noise makers. Once the farmers know the elephants are coming, they then try to deflect them with devices such as firecrackers.



*The Research Assistants are out in the field six days a week collecting data*

## OUTREACH AND TRAINING

### Scholarships

We are very proud of three of our university students who are graduating this year. **Grace Neeiyo Masarie** graduated from DayStar University in May with a degree in Communications. With exemplary grades, almost all As, we weren't surprised when she got a job right away. Grace will be working in northern Kenya for World Vision, but hopes to one day work for her community in Amboseli.

**David Sitonik** graduated in October from the University of Nairobi with a BSc degree in Wildlife Management. David also did very well obtaining a 2.1 or "upper second" as it is called in the British system. In a US university it would be equivalent to a B+ or A- average. David is going on to do a one-year diploma in Public Relations which the Elephant Trust is paying for along with a living stipend. David eventually wants to work in the Amboseli community and feels that having PR skills will be helpful.

**Agnes Masoi Kureroi**, who is taking a diploma course in Pharmacy at the Medical Training Center in Nairobi, graduated on December 15 and is getting married two days later in her home area. We wish her great happiness.



*Grace in graduation gown*



*David on graduation day with his brother, mother, Cynthia and ATE's Office Manager Purity Waweru*

And, at the post-graduate level, **Peter Ndunda** received an MSc with Honors in Geographic Information Systems (GIS) at the University of Redlands in California. Last year he worked as a GIS consultant for ATE, and we lent our strong support to help get him a scholarship and paid for his airfare. Peter writes: "...my thesis... defense committee gave me an 'A' for my masters project (I designed an enterprise Campus GIS for the University)... I also did a couple of presentations about my... project at the ESRI International User conference...[and]... to the University of Redlands executives. The university is in the process of [implementing] the system. I had a successful interview with the Information Solution Group at the [World] Bank ... for a Geoinformation consultant position, and they recently hired me! This is such a great opportunity to use my GIS skills to 'spatially-enable' the... Bank and contribute to the development of the developing countries! ...I am so glad and grateful for all your support..."

In the meantime we have started supporting two more university students from the Amboseli community. **Resiatio Faith Oloitipitip** has started a degree in Business at the University of Nairobi. **Jacob Kipaa** is also at the University of Nairobi and is studying Land Management.



*Resiota Faith Oloititip*

We now have four girls in secondary school and will be choosing two more to start in January. Eventually we will have eight at a time, two in each of classes. Our university students have been helping us mentor these girls.

Silantoi Metui and Josephine Pilanoi (left) are just about to complete their second year of secondary school at Kimana High School. In the Kenya system it is called “Form II”. They have two more years remaining.

Two new girls for this year are Monicah Kadege and Sein Martintin (right). Sein is an outstanding student and because of her performance in primary school was able to secure a place at one of Kenya’s National Schools, Moi Girls School in Kabernet. There are only a handful of these in the country and only the best students are taken. We are very pleased to see that Sein has more than held her own in this school. Monicah is at the Noonkopir Girls School in Kajiado District and is also doing well.



*Jacob Kipaa*



### Training

The training courses held by the Amboseli Elephant Research Project continue to be very useful and popular. This year the emphasis has been on training the Amboseli Tsavo Group Ranch Association scouts. There are 80 of

these scouts patrolling the seven group ranches that make up the Association. Their main job is anti-poaching but we feel it is also important for them to know more about elephants.



## ADVOCACY

In the last few years more and more of our time has been spent on being advocates for the ethical treatment of elephants in the wild and in captivity. Since we hold the base-line information on how, wild, relatively natural elephants behave, people involved in the management and care of elephants come to us for advice.

At first we didn’t know how appropriate it was for us to be involved in the captive elephant world, but as we learned more and more about the plight of most elephants in captivity, we felt that there was no way we could stand back and keep quiet. ATE’s Executive Director in the US, **Betsy Swart**, has had long experience working with captive elephant issues and she has educated us and continues to bring the most urgent of these issues to our attention. Our first action as an organization was in 2003 when we produced a statement, signed by all of us who have worked on the Project, calling for a ban on elephants in circuses. This letter is on our website: [www.elephanttrust.org](http://www.elephanttrust.org).

Up until this year I have been the point person in the field trying to answer these requests regarding captive elephants, but more recently AERP’s Director of Research, **Joyce Poole**, has taken over this role and she is doing a fantastic job. Just last month she flew to Chicago to testify at a hearing of the Chicago City Council on the keeping of elephants in zoos in that city. See her testimony at: [www.elephantvoices.org](http://www.elephantvoices.org).

We do not feel that all elephants should be removed from zoos, as we do for circuses, but we do feel strongly that only zoos that can offer adequate space, a relatively warm climate, and a humane system of care should keep elephants.

**Cynthia Moss, Director**