Conservation - Community - Research

MPALA MEMOS

TOP STORY

MPALA'S GREVY'S MAKE TRACKS

Victoria Zero

On a July morning in Samburu National Reserve, a large group of Grevy's zebras lumbered across the plains. Some of our them researchers photographed and passed the photos on to me at the Laikipia Grevy's Zebra Project. As I quickly scanned through this unusually large group of stripy creatures, my eyes suddenly locked on someone familiar. That swirled rump, that inverted, branching V, that dark islet... Those features could only belong to one female: F08 167. I suppose it's true what they say about a familiar face in the crowd.

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The inverted, branching V can be seen on the female's right, back hip (right). Photo courtesy of Victoria Zero.



COMMUNITY

GETTING THE BIG PICTURE: NOTES ON OUR FIRST PHOTOGRAPHY TRIP FOR THE LAIKIPIA BOOK PROJECT

Tui De Roy and the Roving Tortoise Team

We arrived in Laikipia feeling as green and wet behind the ears as a newborn impala. True, for the last 40 years our team had



Hippopotamus drifting along at Hippo Pools. Tui De Roy, Roving Tortoise Photos.

photographed wildlife at the far reaches of the earth, from diving with sharks and whales in the open ocean to following condors in the Andes Mountains of South America or hornbills in the rainforest of Indonesia. Our pursuits had taken us from the salt-spangled Bolivian desert to polar regions both north and south. But here we were on our first big African shoot, to document "accurately and honestly" the whole of the Laikipia region for a large book project by the Laikipia Wildlife Forum. We hoped that, by applying our particular style of photography, this would result in a tool to demonstrate to the ...continued on page 9

A GUIDE TO THE WHISTLING THORN ANTS IN LAIKIPIA

Dino J. Martins

Whistling thorn acacias (*Acacia drepanolobium*) cover large tracts of land in Laikipia. Whistling thorns are engaged in an intimate relationship (or "symbiosis") with several different kinds of ants. These fascinating trees and ants have been the subject of many years of amazing research by scientists at Mpala.

The whistling thorn is protected by a standing guard of ants – the trees' personal *askaris* – from the nibbling mouths of grasshoppers and even large browsers like giraffes and elephants. The ants swarm towards anything that disturbs their host tree and start biting furiously, encouraging the intruder to seek food elsewhere. In return for this protection, the trees provide the ants with housing in the form of swollen thorns (often called galls),

"WHISTLING THORNS ARE ENGAGED IN AN INTIMATE RELATIONSHIP (OR 'SYMBIOSIS') WITH SEVERAL DIFFERENT KINDS OF ANTS."

as well as food from specialised "extra-floral nectaries" – cup-shaped glands at the base of the leaves that secrete a sugary drink for the ants.

Several different species of ants are commonly found on whistling thorn acacias. Some of the ants occupy an entire tree, some live only on part of a tree, and others live away from the tree but visit it for food.



Crematogaster sjostedi. Photo by Dino Martins.

Some are true mutualists – they benefit the tree and the tree benefits them; others are less useful, providing meagre returns for the tree, or in some cases, doing more harm than good. Here is a brief run-down of the ants you might observe next time you stop to look up close at a whistling thorn tree.

Cocktail Ants: *Crematogaster mimosae* and *Crematogaster nigriceps* are two common

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Crematogaster nigriceps. Photo by Dino Martins.

ANIMAL SPOTLIGHT

A GIUDE TO THE WHISTLING THORN ANTS IN LAIKIPIA

... continued from previous page

and dominant ants on the trees across Laikipia. *Crematogaster sjostedti* also occurs on trees in north-central Kenya, especially on older trees. All *Crematogaster* species raise their abdomens (or "tails") when disturbed or alarmed, hence the common name cocktail ants. All of these ants form one or two large, rounded entry holes into the swollen thorns, though *C. sjostedti* often make their nests in holes in the trunks of trees rather than in the thorns. Usually, a single species of ant occupies each tree.



Tetraponera penzigi. Photo by Dino Martins.

Tetraponera penzigi: A long, skinny, sleek, and shiny black ant. Shy and skulking, they do not emerge in large numbers when the tree is disturbed. This species creates entry holes into their thorns that are tiny and dotted over the entire surface of the swollen thorn, much like a salt shaker. One colony usually occupies an entire tree or sapling.

Camponotus species: Camponotus sericeus is a common tramp species typically found foraging alone on the leaves. It is quick to flee in the presence of intruders, often by dropping to the ground. Camponotus braunsi is less common on the whistling thorn in Laikipia, but more common on Acacia seyal (a red- or yellow-barked tree very similar to the whistling thorn) in northern Kenya.



Camponotus braunsi. Photo by Dino Martins.

Cataulacus species: These shy ants are usually found alone foraging on the tree trunk. These ants are considered parasites as they do not defend the acacia. The entire colony typically lives in a single swollen thorn. These ants are found on both whistling thorn and *A. seyal*.

Take a moment to explore the whistling thorn trees around you and you will be amazed at the diversity and behavior of these dudus!

Please send any insect-related questions or observations to the Insect Committee of Nature Kenya: insects.eanhs@gmail.com.



Cataulacus species. Photo by Dino Martins.

STAFF PROFILE: THE CHEF TEAM OF MPALA

Allison Williams

Every evening At 7:30 p.m., the researchers at Mpala make their way to the dining hall for dinner. With dishes such as chicken cacciatore, minestrone soup, and grilled pork being served, it is hard to believe you are eating at a research center and not a restaurant. For the past decade the kitchen staff of Mpala has worked to continually improve the quality and diversity of food they prepare. Researchers and guests alike remember a time when meals consisted of only lentils and rice. Needless to say, the food at Mpala has come a long way since then.

The Centre's restaurant-style food can be attributed to the dynamic team of Head Chefs Eunice Koech, Magda Kalanju and Agnes Wacho and Assistant Chefs Picoty Chepkemoi and Margaret Machuch. Luckily, these five women enjoy working in the kitchen as much as everyone enjoys eating their dishes. "We get to be creative and make new things every day," explained Eunice. It is rare when you do not hear laughter and chatter coming from the kitchen. The cheery atmosphere is infectious and anyone walking by the door cannot help but stick his or her head in and say hello.

Even with all the fun the women have, they take their cooking seriously. Hours are spent researching new recipes in cookbooks, magazines and online sources such as cook. com and chef.com. "We look up new dishes and pick interesting ones," said Agnes, "and then we practice and practice."

A number of challenges come along with making tasty and assorted dishes. The number of people that eat at Mpala varies greatly from one day to the next and the kitchen must estimate how much food will be enough (and not too much) to feed everyone. "We have equations we use to know how much food to make," said Eunice, "for example, we



From left to right: Eunice, Margaret, Agnes, Picoty, and Magda. Photo by Allison Williams.

estimate two chapati for each person because we know every person loves chapati!"

The women have also gone above and beyond on the holidays. This past year, Thanksgiving did not pass without a celebration as the kitchen prepared a stuffed turkey, mashed potatoes, ginger green beans and pumpkin pie for a group of fifteen. Christmas Day was no exception with a large brunch, and recently at Easter, to the amazement of the twenty-odd researchers who were at Mpala, a huge chocolate and peanut butter Easter egg cake was presented at lunch.

When they are not in the kitchen the women have extended their hands to the community. Last February when many Kenyans fell on hard times, Magda and Eunice spearheaded a food-donation campaign among the Research Centre and Ranch staff. The "Mpala Save a Life" campaign collected a total of Ksh 10,000 worth of dry goods to give to the Red Cross of Laikipia.

The Mpala chefs also enjoy spending time with their friends and family and watching movies. "We also love to sing!" added Agnes as she smiled and stirred a large pot over the kitchen stove. As long as laughter and singing can be heard coming from the Mpala kitchen, be assured that a delicious meal will be waiting for you.

DR. JOSH GINSBERG

Margaret Kinnaird

New York City is a place where "wild" often refers to the nightlife and the closest thing to a natural landscape is Central Park. Residents rarely drive, much less know what lies beneath the bonnet of a car. So it might seem incongruous that Dr. Joshua Ginsberg, a boy born and raised in the Big Apple, ended up being one of the world's experts on Grevy's zebra and African wild dogs – not to mention a darn good bush mechanic.

Josh says he owes his fascination with all things wild to the afternoons he spent at the Central Park Zoo as a pre-teen, mucking out cages and taking a chimp for a walk in a stroller while he waited for his father, who was Commissioner of Parks, to get off work. By the time I first met Josh in 1984, he was a Princeton PhD student and I was co-ordinating a Cornell University project on white-fronted bee-eaters in Nakuru National Park. I was driving along the Nakuru-Nairobi highway when I saw a helpless looking fellow on the side of the road next to a broken down vehicle (the bush mechanic skills where honed later). Little did I know when I stopped to give assistance that this strange, young New Yorker would provide my first introduction to the wilds of Isiolo and Laikipia (in search of



wayward Grevy zebras), and 12 years later, would become my colleague and boss at the Wildlife Conservation Society.

Now, more than 25 years since our sideof-the-road meeting, our mutual and

Josh and his daughter Madeleine. Photo by Margaret Kinnaird.

continued interests in Kenya, Laikipia, and wildlife conservation brought have full circle. us As Executive Director of Mpala, ľm lucky to have Josh serve as



Dr. Josh Ginsberg.

a scientific advisor for the Mpala Research Centre and Conservancy. He has also become a generous donor, providing a significant gift from the Estate of Marian O. Naumburg, an estate that he co-manages. Marian, a life-long friend of Josh's grandmother and mother, and a close friend of Josh's for 48 years, was passionate about wildlife and open space preservation.

Although he frequently visits the wild places of Africa, Asia, and Latin America, Josh is once again a hardfast New Yorker, commuting between his home in Manhattan to the headquarters of the Wildlife Conservation Society (WCS) in the Bronx Zoo where currently he is the Senior Vice President of the Global Conservation Program. Josh's contributions to WCS have been significant, varied and always described as being done with more energy than most normal people could summon.

In addition to his "day job" at WCS, Josh is an Adjunct Professor at Columbia University, where he teaches conservation biology and international policy and has supervised dozens of MSc and PhD students. He also serves on the Hawaiian Monk Seal Recovery Team, which he chaired for eight years, and as an editor for a number of scientific journals. He is an author of more than 50 scientific papers and has edited three books on wildlife conservation, ecology and evolution. In his spare time, Josh dotes over his wife, Cathy, and their 4 year-old daughter, Madeleine.

MPALA WEATHER CORNER



MPALA-AT-A-GLANCE

Student Groups

• The Princeton University semester abroad program completed its fourth module of the Kenya field course in April. The group of thirteen undergraduates arrived in January and was taught by Corinna Riginos, Dino Martins, Dan Rubenstein, Wole Soboyejo, and Kelly Caylor.

• In early March, forty-eight undergraduates from McGill University spent a week at Mpala as a part of their Canada Field Studies in Africa (CFSA) program. Staying at both the campsite and Research Centre, the students conducted field work and attended lectures.

• Over the span of four weeks, Leeds University had two groups of thirteen studying at Mpala. From March through April the groups attended lectures and conducted research for independent projects as a part of their African Field Course (MSc.). •

MPALA HISTORY

MPALA MEMORIES, PART IV: LIFE AT THE YOUNG-ISBELL RESEARCH CAMP, 1992-95

Truman Young

Evenings at our research camp along the Ewaso Nyiro were often spent sitting around a campfire, watching the bushbabies leap through the trees along the river. Camp visitors over the years included leopard, striped hyena, wild cat, otter, elephant,



Hartebeest. Photo courtesy of Truman Young. noticeably since then, especially in areas of black cotton soils. Warthogs were very rare until (in the early 2000s) herders were no longer allowed to take dogs out with them.

For the first several months we (and the staff) had the camp to

hippo, buffalo, waterbuck, bushbuck – and many baboons and vervet monkeys. The latter two never became a nuisance because we were careful not to let them discover that we had accessible food. There were a few close calls with some of our other visitors, including once when Lynne nearly stepped on a cobra while hurrying to photograph Mount Kenya bathed in alpenglow, and the time I was chased by a hippo one night when I was not being careful.

The flora and fauna on Mpala have changed since the early 1990s. Back then, hartebeest were still relatively common. We saw occasional glimpses of reedbuck on the escarpment, now apparently gone. Along the Ewaso Nyiro river, there were far more fever trees than today – before they became victims of elephants, honey hunters, and old age.

"THERE WERE A FEW CLOSE CALLS WITH SOME OF OUR OTHER VISITORS... I WAS CHASED BY A HIPPO ONE NIGHT WHEN I WAS NOT BEING CAREFUL."

On the other hand, at that time there were no crocodiles or wild dogs anywhere on Mpala. Kudu were scarce, and there were exactly seven Grevy's zebras and a handful of hippos on the property. Elephants were already fairly common, but their numbers have increased ourselves as the only researchers at Mpala. Gradually, we began to share our camp with student researchers, including Philip Muruthi, who studied baboons. Philip now works for the African Wildlife Foundation. His thenassistant, Michael Wilson, is now at the University of Minnesota.

My main project was deciding where to put the KLEE exclosures, and I spent considerable time surveying the area below the escarpment before deciding to put them up in the black cotton. I also began the plant collections that later became the core of the Centre herbarium, nicely mounted by Michelle Lewis. Although I mainly worked alone, I hosted several St. Lawrence University interns on short projects.

One day in 1992, while walking near the camp with a visiting Rutgers anthropology student, I picked up an interesting rock and asked her in jest, "Is this a hand axe?" She looked at it briefly, and said, "I think so." This prepared me for a later occasion when I happened to glance out the window of my car and saw what looked like another hand axe. Sure enough, it was. Those were the first official discoveries of these Acheulean and Stone Age archaeological sites on Mpala, and the sites have since yielded many more artifacts.

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TOP STORY MPALA'S GREVY'S MAKE TRACKS

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Part of my work with the Laikipia Grevy's Zebra Project is to track individual zebras' movements, survival, and reproduction using photos. Thus, this day was a bit of a personal milestone: I had recognized the stripe pattern of a zebra I had only seen twice previously, months earlier, in an entirely different context. I must be getting good at this.

Luckily, I don't need to memorize hundreds of stripe patterns. Using an automated photo identification program developed specifically for the project, I was able to confirm that the female in Samburu was, in fact, already in our computer database.

More importantly, the database was able to confirm that this zebra had last been seen on Mpala in September 2008, eight months before. Samburu and Mpala are 72 km apart as the crow flies and most likely our gal had to take a much longer route to reach Samburu.

This news is exciting for a couple of reasons. First, it implies that there is a migration corridor for Grevy's between these two areas. Even with all of the human settlements, livestock, fences, and other obstacles between Mpala and Samburu, this female managed to find a suitable route north. Another exciting implication is that the photo database works to track largescale movements of Grevy's zebra. Multiple organizations working in Laikipia, Isiolo, and Samburu districts have tracked zebras with GPS collars, but none have recorded movement between Laikipia and Samburu National Reserve – until now.

"...IT IMPLIES THAT THERE IS A MIGRATION CORRIDOR FOR GREVY'S BETWEEN THESE TWO AREAS."

This finding also raises new questions. Was this zebra's trip from Mpala to Samburu part of a regular, annual migration, or was she spurred to look for food farther afield than normal because of unusually dry conditions? How many other animals may be making this journey? How do we ensure that corridors remain open so that highly endangered species like Grevy's zebra can continue these long-distance journeys?

We hope that the photo database system will help answer some of these questions – and yield more interesting and surprising findings about Grevy's zebra!

We'd be interested in seeing your Grevy's photos from around Kenya. If you have clear shots of an animal's right side (like the photos of the female on page 1), please send them, along with the date and location to grevyspics@gmail.com.



Grevy's zebra on an afternoon stroll. Photo by Allison Williams.

GETTING THE BIG PICTURE: Notes on Our First Photography Trip For the Laikipia Book Project

...continued from page 1

world the rare natural treasure this region represents — a bewilderingly large subject to squeeze between two covers.

The dust cloud hadn't even settled on our arrival at Mpala when Margaret, with whom we'd caught up in the remotest parts of the globe over many decades, took us out on our first game drive. She had first planted the seed that grew into this three-way project involving LWF (for whom the book had been a long-term plan), our little team of four known as Roving Tortoise Photos, and our publisher of many previous books back in New Zealand, David Bateman. By the time the full moon rose in a lavender sky that same evening, we were fully immersed in our subject, surrounded by our first herd of elephants. Our cameras started whirring and did not stop for the next forty days.

Hosted by LWF and its members across Laikipia, we travelled to the four corners of the plateau and were welcomed everywhere with extraordinary warmth and helpfulness. We shot more than a thousand photos every day, turning our lenses on everything large and small, from pastoralist to pachyderm, magnificent thunderclouds (yes, it rained and how!) to buffalos, birds and butterflies. Uncannily, the heavens opened every time we reached a new location, during what was supposed to be one of the driest months (February). The parched earth drank



Wild dogs on the hunt. Tui De Roy, Roving Tortoise Photos.

thankfully and bloomed into a kaleidoscope of light and colour. And the thick black cotton mud attached itself to our tripods (and everything else) with glee.

Now we are back home with myriad powerful memories and 50,000 photos to sort, edit, optimise, label and catalogue before a first draft selection can be set aside for the book. We have wild dogs running like comets in the twilight and bulky shadows of rhinos against soft dawn hues enveloping Mt Kenya; elephants kicking up hot dust and impalas huddling in a deluge of rain. And a memorable giraffe standing in the eye of a complete double rainbow, to name but a few.

There will be two more trips, in which we will apply the lessons learned from this first experience and concentrate on specific topics and places to broaden our coverage under different seasonal light. Then, once all the final contents are assembled, a further 10-12 months will be needed for the editorial

process to be completed and the books delivered to Kenya. This promises to be the most memorable project we've worked on yet, rich beyond description.

A reticulated giraffe in front of Mt. Kenya. Tui De Roy, Roving Tortoise Photos.



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MPALA HISTORY

MPALA MEMORIES, PART IV: LIFE AT THE YOUNG-ISBELL RESEARCH CAMP, 1992-95

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Lynne and I, as well as various other researchers, spent three years living and working out of our tented camp. By 1995, however, the first permanent buildings were being built at the site of the current Research Centre, and a number of new researchers were scheduled to arrive. The days of our river camp were coming to a close.



The compound kitchen. Photo courtesy of Truman Young.

NEW MPALA WEBSITE



The Mpala Research Centre and Wildlife Foundation has just unveiled its new and improved website.

Heather Larkin, a prior Mpala researcher, and Allison Williams, Princeton in Africa's 2009-2010 Fellow, deserve hearty thanks for the many hours they put into the design and content of the new site.

The website features new additions such as the Director's Corner, links to photography sites of Mpala researchers, and an interactive research project map. It also still has information for prospective researchers, a detailed history of the founding of Mpala, and much more.

Check it out at: www.mpala.org •

Research

MPALA PUBLICATIONS 2009

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Mpala publications from the first half of 2010 will be featured in our next issue.

MONITORING GUIDE NOW AVAILABLE



Cover of Monitoring Rangeland Health.

Monitoring Rangeland Health:

A Guide for Pastoralist Communities and Other Land Managers in Eastern Africa, Version II is now available in both print and PDF formats. This guide provides simple methods for monitoring land health and was written for a wide variety of users and management objectives. (See the January 2010 issue of Mpala Memos for a more complete overview).

The guide can be downloaded from the Mpala website:

http://www.mpala.org/Monitoring_Guide.php

To request a print copy, please contact Corinna Riginos (criginos@gmail.com).

-MPALA WILDLIFE FOUNDATION & MPALA RESEARCH TRUST-

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George Small (1921-2002)

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