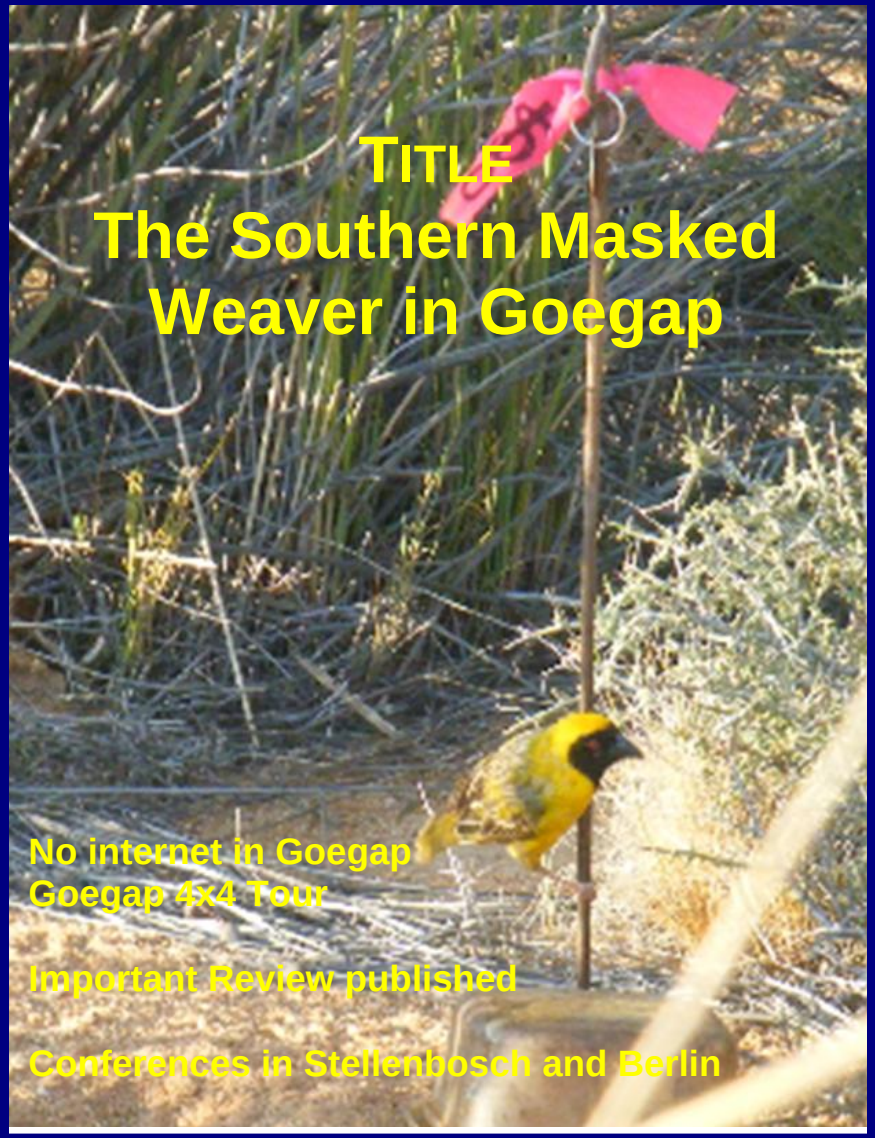
Nr. 29, Octoberuly to September

FSM-TIMES

FourStripedMouse



EDITORIAL

IMPRESSUM

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WILLKOMMEN BEI DER NEUNUNDZWANZIGSTEN AUSGABE DER FSM-TIMES!

Liebe Leser,

ein Jahr geht schnell vorbei, und schon wieder ist eine neue Fortpflanzungssaison, und die letzte FSM-Times des Jahres wird publiziert. War die Fortpflanzungssaison des letzten Jahres die schlechteste in der Geschichte des Striemengrasmaus-projektes, sieht es dieses Jahr sehr gut. Es hatte immer viel geregnet, und wir erwarten, dass die Population stark anwächst.
In dieser FSM—Times finden Sie wieder viele Artikel von Feldassistenten, und ich wünschen Ihnen viel Spass bei der Lektüre. Auch wurde, nun im 11. Jahr des Projektes, ein wichtiger Übersichtsartikel publiziert. Wenn Sie Wissenschaftler sind, kann ich diesen nur zur Lektüre empfehlen.

Ihr
Carsten Schradin

WELCOME TO THE TWENTY-NINTH ISSUE OF THE FSM-TIMES!

Dear Reader,

Its another breeding season – the 11th of our long term field study! And while last year was terrible, the worst season in our study, this year is very good. We had rain all year, there is lost of mouse food, and we expect the population to grow and grow.
The 11th year is also time for review. This has just been published in the highly ranking journal *Molecular Ecology*. I suggest to everyone. But first enjoy the new issue of the FSM-Times, which is as always full of interesting stories from the students and researchers at the research station.

Carsten Schradin

NAMAQUALAND-WEATHER

By Ivana Schoepf

THE LAST THREE MONTHS	July	August	September
MINIMUM TEMPERATURES			
NIGHT	-1.9	0.4	0.4
DAY	8.6	9.2	12.5
MAXIMUM TEMPERATURES			
NIGHT	19.3	14.8	15.5
DAY	26.6	31.7	35.9
NIGHTS WITH FROST	4	1	1
RAINFALL IN MM	17.3	19.6	0.3
DAYS WITH RAIN	4	5	2

THE PEOPLE IN GOEGAP

By Ed Yuen

After the busy time around Easter, the research station is one again quiet, as no more than five people have been here at a time since July. Between June and September we had all together only five new people which arrived and stayed at different times. First up was Kim Ferrari, a student from Switzerland that came to do his own project here. Kim's project was on personality in striped mice. In particular, he was interested in comparing boldness personality between open-field in the presentation arena and in the field by using a remote controlled snake as stimulated danger for the mice. Not long after Kim arrived, another student from Switzerland joined us: Nina Thürlimann. Nina also had her own project. She looked at the trade-off between feeding and basking behavior in striped mice. Both Kim and Nina stayed for a period of six weeks. End of July we hade two well known guest from Zurich: Susanne Guldener and her daughter Noel came for one week within our "Mouse Safari" program.
Just before Nina left, three more students arrived at the research station: Meredith Palmer and Maeve Forster from the USA and Salome Prinsloo from South Africa. Both Meredith and Maeve will remain with us for six months and will help with collecting long-term data on the striped mice. Salome is doing a year long internship in the Northern Cape as part of her course of studies in reserve management. Before moving to the reserve, she worked in a guest lodge near Springbok. Then she moved to the reserve and helped for

a time at the office. Since a month, she has been with us, as she would like to get experience with collecting animal behavior data in the field. Finally, after and absence of eight months, Ivana came back to the research station to finish writing up her thesis as well as collecting blood samples for the measurement of AVP and recording resting metabolic rates of wild mice.

The group at the research station in September. Left to right Ed, Meredith, Maeve, Ivana, Solome.

THE SLOW DETERIORATION OF LOGICAL THOUGHT: ONE RESEARCH ASSISTANT`S ACCOUNT

By Maeve Forster

So far my experience is this: living on a reserve inhibits logical thinking. This sounds absolutely ridiculous but my point is that the simple change of context has rendered me insane. As everyone knows, we base our knowledge of objects on the five senses: touch, taste, sight, sound, smell. Given the right context, we can usually use just the information from one of these senses to determine what an object is: the smell of apple pie is sufficient without having to open the oven door to see it, or the chorus of bells in the Swiss country side immediately invokes thoughts of "Cows". Because of my complete change of living situation, I can no longer take simple cues and form logical conclusions.

The first moment of insanity occurred on a late Friday afternoon. It was about 16:00 and I had just finished radio tracking. I was walking back to the gate when I saw an animal dashing across the plain on the other side of the field site. Due to the size of the creature, my first thought was "Springbok". Upon further observation I noticed that it was black, not light in color and therefore not a Springbok so perhaps a jackal then. But it seemed to have long fur, and besides, it was coming straight for me. Although I have not encountered one, I have never heard of a jackel speeding straight towards a person. It stopped about 60 meters away and stared me down. I stared straight back and could not believe the third answer that I had come up with - dog. So I walked towards it to scare it off but it started to come towards me. This happened a few more times, until finally it gave up and just ran straight for me, wanting a little attention. It was a dog. A plain old simple little dog, but I could not believe it. The whole time that we were checking each other out, I kept telling myself over and over that there was no way it was a dog. But it was in fact a sheep dog from visitors at the farm. Simply the fact that I was on a reserve prevented me from recognizing a domestic dog.

The second instance of a complete lack of mental power happened in the middle of the night. I was sleeping quite comfortably when persistent barking of the resident Labrador dog woke me up. I rolled myself out of bed to go and investigate, saw that his snout was glued to the front door, and opened the door to see what the big fuss was about. I heard a horse. This was a ridiculous thought for two reasons: 1) there aren't any wild horses on the reserve and 2) there is a fence that surrounds the house. Maybe some jackals or other small critters could get in, but the thought of a horse just blew my mind. The sound of hooves faded and the dog calmed down so I went back to bed. Sometime later Meredith got up to use the restroom. I heard the back door open followed by a large animal trotting itself right on by my window. I opened the curtains to the view of the retreating rear-end of a gemsbok. A gemsbok is a hoofed animal about the size of a small horse with the same gait. Without the visual of gemsbok, I thought "horse" and could not make the simple leap – based on context – to "gemsbok" and instead drew the conclusion that I was hearing a jackal.

While living here is continually making me second guess myself, I love it. It always smells good outside, the air is always fresh, and it is quite a unique thing to be reading outside and drinking a cup of tea only to look up and witness the frolicking of young baboons in the field just beyond where you are sitting. Although my brain functions are slowly crumbling, I would rather not be anywhere else.

LIFE WITHOUT INTERNET

By Meredith Palmer

Dinosaurs in Jurassic Park were genetically engineered to die if diets lacked essential amino acid components. I may not be gargantuan, scaly, or synthesized by mad scientists (at least, to my knowledge), but there is one element to my existence that I would perish without – the internet.

This isn't simply a constant, nagging need to tweet on my Twitter, trawl randomly through the vast sea of Wikipedia, or venture into the lolcat-infested wilds of YouTube for a quick laugh. I'd like the think I'm not quite that shallow. As a recent college graduate, I am experiencing for the first time long-term separation from close friends and having to anticipate returning to the States after six months in Africa jobless and penniless. Once a week in town just hasn't been enough for someone trying to search out employment, apply for grad schools, and remain in reasonable contact with friends who have the gall not to put their lives on pause in my absence (so inconsiderate!).

My solution? Armed with a MTN internet modem, once or twice a week I take my laptop on a thirty minute hike to "Cell Phone Pass". Two bars of cell reception are just enough to allow me to log into my Gmail and reconnect with the world, a blessed relief despite the snail's-pace connectivity.

At CPP, there are, of course, no amenities that would allow me to check my internet in relative comfort. Not even a convenient mound of dirt that I could rest my butt upon out of sight of the never-ceasing stream of tourists. Instead I sit in full view of everyone, on a giant rock right by the side of the road, happily typing away on my laptop. An unexpected sight for a nature reserve, to say the least.

Everyone slows down to stare. Some of the stop, get out, and point. Cameras click. I'm waiting for the day when someone calls out, "What are you DOING?" so that I can yell back, "Checking email! What else?"

ERDE AN GOEGAP – DAS LEBEN OHNE STETIGEN KONTAKT ZUR AUSSENWELT

Von Kim Ferrari

Heutzutage ist es fast unmöglich, einfach mal unerreichbar zu sein. Das Mobiltelefon steckt in der Hand- oder Hosentasche, der Laptop steht auf dem Tisch und drei Zimmer im Haus sind mit einem Festnetztelefon versehen. Ständig kommen Kurznachrichten rein, während man auf Facebook die neuesten Aktivitäten der (vermeintlichen) Freunde abruft. Schon morgens um acht rufen die ersten Vertreter zu Hause an und die nächsten lassen nicht lange auf sich warten. Doch wie entflieht man aus dem Sog der Informationstechnologie?

Eine Möglichkeit ist ein Forschungspraktikum in Goegap. Hier lernt man nämlich nicht nur die Arbeit mit Striemengrasmäusen oder das Zusammenleben mit anderssprachigen Leuten, sondern auch das Leben ohne Internet, Handy und Telefon.

Die ersten drei Wochen vergingen schnell. Ich lernte jeden Tag etwas Neues und war so beschäftigt damit, jedem Tier nachzuschauen, das sich irgendwo bewegte, dass ich gar nicht mitbekam, wie die Zeit verging. Dann fing ich an, alles und jeden zu Hause zu vermissen. Die Arbeitswoche hatte gerade erst wieder begonnen und es dauerte noch vier Tage, bis wir wieder in die Stadt fuhren. Als ich es dann am Abend nicht mehr aushielt, entschied ich mich, mit dem Mountainbike (=normales Fahrrad) die wenigen Kilometer zum Office zurückzulegen. Auf den ersten Metern erschien mir das noch als die beste Lösung. Doch gerade als ich den „point of no return" erreichte, wurde der Sand tiefer und das Fahren mit dem Bike unmöglich. Die Dunkelheit erschwerte mein Vorhaben noch mehr. Ich schob also den Drahtesel durch den tiefen Sand und kam etwa 45 Minuten später völlig erschöpft beim Office an.

Noch bevor ich beim öffentlichen Telefon war, hörte ich ein Läuten. Ich befürchtete nichts Gutes und als ich das Telefon erreichte, bestätigte sich meine Vermutung: Das Telefon war kaputt und die Anstrengung umsonst.

Beim zweiten Mal war ich schlauer. Ich verliess mich gar nicht erst auf das Public Phone, sondern zog mit meinem Handy los. Ich kletterte auf einen der Berge, um in diesem Funkloch irgendwie an ein oder zwei Balken Empfang zu kommen. Die Freude war gross als ich auf Anhieb einen Anruf tätigen konnte, die Enttäuschung umso grösser, als niemand den Anruf entgegennahm.

Mittlerweile habe ich erkannt, dass es viel angenehmer ist, wenn man sich nicht Tag und Nacht darum sorgt, ob denn jetzt die SMS angekommen ist oder nicht. Man geniesst die Ruhe hier draussen noch viel mehr, wenn man anstelle des Laptops ein Buch zur Hand nimmt und das Mobiltelefon bis zum nächsten „Town Day" ausgeschaltet lässt. Dies ist eine wertvolle Einsicht, die ich hoffentlich auch mit nach Hause nehmen kann.

MY EXPERIENCE IN NAMAQUALAND AS A STUDENT

By Salome Prinsloo

Good day fellow readers, my name is Salome Prinsloo and I will be sharing my experience in Namaqualand with you. I am a proud South African with a passion for nature, hence the reason why I study game ranch management. I am studying through the Nelson Mandela Metropolitan University in George in the Western Cape, my campus is called Saasveld. The course I study stretches over three years, the first two years are theory and the third year is a practical year where the students get send out there in the world to work on a nature reserve or game farm and fulfil all the criteria the university give us. Then at the end we get evaluated on our reports and presentations that reflect our experiences, that we deliver after we finished the third year.

The month of January 2011 marked the end of one age, and the start of another. I, currently a third year Game ranch management student on my practical year was to make myself at home for the year in Namaqualand, far away from home or any one I know. Namaqualand appeared harsh and deserted at first when I drove through the dark tumbled rocky landscapes and fiery skies to reach my destination. I was terrified and didn't know what to make of this year. The experiences to be had and the challenges ahead seemed somewhat daunting as well as exciting at the same time, but as the time went by during my practical year, I experienced a taste of true Namaqualand in full bloom. By that I am not only referring to the good rainy season and abundance of flowers in spring which most people pay a visit to Namaqualand for, but I who see things from a nature lovers', ecologist's and conservationist's point of view have noticed the true beauty of Namaqualand as a whole ecological picture and have fallen in love with the place.

I was first placed at Naries Namakwa Retreat guest farm just outside Springbok in order to fulfil criteria regarding mainly hospitality, tourism and lodge management. I was originally appointed as the student nature conservationist who had to be responsible for the research and gathering of data on the natural area out there and put the info together in an interesting way for the guests, to update and maintain the hiking trails as well as helping out with other tasks regarding maintenance. Even though nature conservation was my main post, criteria requirements forced me into the situation where I had to learn about lodge management and thus had to work in the lodge self, with guests. Due to the fact that their main income comes from the lodge only, at the end I worked more in the lodge than executing nature conservation.

In order to fulfil the rest of my criteria regarding nature conservation, I got moved to Goegap Nature Reserve, where I am currently working with top conservationists and botanists of Namaqualand and where I am getting exposed to mainly the research part of things. Tasks I do include things such as fixed point photography, plant and veld assessments as well as game counts. I am staying on Goegap nature reserve, at the research station and am sharing it with the research station manger and overseas students from U.K, U.S.A, and Italy, who are all doing their research projects on the social behaviour of the striped field mouse. I assist them during the trapping, marking/tagging and radio tracking of individual mice for their projects and in that way am gaining more practical techniques and getting to understand how some of the equipment function, such as a radio tracking device and cyber tracker.

I am finding so far that this field I study is definitely worth it and I still find it very interesting. One would never get bored, because it covers such a wide range of possibilities and tasks that could be done. I was and still am experiencing the best of different worlds, from exploring the wilderness and discovering breath taking things, to being part of the tough crowd doing work where one gets dirty, right through to being refined and elegant, working with guests.

During the course of the year various obstacles and situations were faced. I learned the value of taking these one at a time; no man or woman could attempt to do everything in one go.

Even though this year was frightening and challenging, I found that it was definitely worth it, because not only did the practical year give me a faire amount of practical skills and knowledge, but it also gave me a great opportunity to meet and interact with new people all the time and to find myself as a person, self value and my destination in life.

HOW TO BECOME A FIELD ASSISTANT?

Only people with a biological background can become field assistants. These are students of biology, veterinary medicine or related areas. The work of field assistants includes: radio-tracking, trapping and marking of small mammals, behavioural observations, work at the research station, including maintenance, and much more.

People interested in working as a field assistant for 2-3 months write an email to carsten.schradin@ieu.uzh.ch. Please write a short motivation and attach a CV. You will then obtain more information.

4x4 Adventure

By Ed Yuen

One of the Sundays in September, we decided to go for a drive on one of the many 4x4 trails that the reserve offers. Maxie, the reserve manager, had suggested to go up the old mine shaft route, just north of the office, to view the flowers. It was already towards the end of the flower season, but Maxie had told us that up there the flowers were still in full bloom and the area was very beautiful. We had driven 4x4 routes before in Goegap and had quite an adventure driving on the many sandy and flooded roads on our previous holidays, but the old mine route in Goegap was something of a myth. Up to now, we had driven virtually all the 4x4 routes in the reserve, but we always, consciously or unconsciously, avoided taking the mine road. The fact is that driving the old mine shaft road entails going up (or coming down depending on which direction you start the trail) a huge, smooth boulder. We had driven this road a couple of times before with Carsten (when he was behind of the wheel!), so we knew exactly what to expect, and that was part of the reason why we were so scared of it. The other reason was that on the Goegap map it was highlighted in pink as a “technical 4x4 route”, i.e. for experts only! Nevertheless, the third Sunday in September, we decided to attempt the impossible and risk our life in the hope to see some beautiful flowers. After a long winding, and very bumpy road, we finally reached the dreaded part. We hoped to drive up the boulder, thinking that surely would be easier, but we did not realized that we had taken the route the other way around. Hence we arrived uphill of the mine. At that point, we had only two choices: face the steep boulder down, or drive back for several hours. We decided to be brave and, bracing ourselves, we started driving down the massive boulder. Once half way through, we thought the worst was over. We were wrong. The last few meters proved to be the worst as the car tilted to an angle that looked very much like 45 degrees. I am sure being inside the car and driving it made things look and feel somehow much worst. The screaming field assistants in the back of the car also did not help. Nevertheless, eventually we made it! At the end we did not see that many flowers, but driving through and having survived the old mine road made it all worthwhile.

The Southern Masked Weaver

By Davina Hill

The Southern Masked Weaver, *Ploceus velatus*, is a resident breeding bird that is common throughout much of southern Africa. It is a familiar sight at the Goegap Nature Reserve and is one of the most charismatic birds that I’ve encountered in South Africa so far. Often, while setting live-traps around the field site to collect data for my project on striped mice or while making observations of their behaviour, I will see a flash of brilliant yellow and find myself in the company of a male Southern Masked Weaver in his breeding plumage.

The Southern Masked Weaver first caught my eye during my two-week stay in Melville, a suburb of Johannesburg, in July this year. My garden was host to a male weaver who had finished building one nest and was busily working on a second that was suspended from a branch of the same tree (see image 1). He would frequently be seen in the garden, calling and displaying. He had already attracted a female to the nest he had completed, and I often observed her entering it with foliage in her bill. Weaverbird nests decorated the trees of many of the

gardens on that broad and leafy street.

Image 1. A newly constructed Southern Masked Weaver nest, Johannesburg (D. Hill)

Goegap was my next destination, and I was pleased to be greeted by a familiar masked face in the garden around the Research Station on my first day here. Now, three weeks in to my field season, I've become accustomed to hearing the swizzling note and glimpsing the yellow and black feathers while I'm working on the main site. One day, while trying to lure the mice out of the bushes for my nest observation with some peanut butter on an upturned tub, a Masked Weaver swooped down and hopped over to the bait (image 2, image 3). A mouse cautiously approached and began to eat, but the Masked Weaver chased it away.

Breeding male Southern Masked Weavers have a bright yellow head, breast and underparts, a dull olive green back and a black mask that extends from the lower forehead to the throat (image 2, image 3). The legs are brown and the eyes are red. Females are less striking with buff underparts, brown eyes, an olive back and head and no mask. Non-breeding adult males and juveniles resemble females in plumage, but adult males retain their red eye colour outside the breeding season. Both sexes have a short, strong, conical bill. They emit a 'swizzling' call, like many weaverbirds, and a sharp '*chuk*' alarm call when distressed.

The Southern Masked Weaver is one of just two weaverbirds recorded at Goegap; the other being the Cape Weaver (*Ploceus capensis*), which is larger (17 cm compared to 11-14.5 cm). Breeding male Cape Weavers are a duller yellow than the Southern Masked Weaver, with a brown wash to their plumage. They have white eyes and no mask. Female and juvenile Cape Weavers have olive plumage and brown eyes. Cape Weavers also have longer, more pointed bills than Southern Masked Weavers. The two species may occasionally associate with each other at breeding.

Both Masked and Cape Weaver belong to the Ploceidae family of seed-eating birds, which includes the striking Southern Red Bishop, *Euplectes orix*, the House Sparrow, *Passer domesticus* (introduced to South Africa from India), and the inquisitive Cape Sparrow, *Passer melanurus*, all of which can be seen at Goegap. House and Cape Sparrows are sometimes grouped within the Passeridae rather than the Ploceidae because, unlike the other members of the group, they are socially monogamous. Monogamous species or populations breed in male-female pairs, while those that are polygamous can have more than one mate at a given time. The Southern Masked Weaver is no exception to this: it has a polygynous (literally 'many females') mating system. An individual male may breed with 2-5 females and produce up to nine broods in a season (Tarboton 2001). Most colonies are held by one male but some boast up to nine breeding males.

Image 2. A Southern Masked Weaver male visits a nest observation at Goegap (D. Hill)

Colonies can usually be found in open landscapes such as grassland, savannah, fynbos, Karoo and farmland; gardens and other suburban habitats are also favoured (Sinclair *et al.* 2002). Nests are normally built in trees, suspended 2-12 m above the ground or over water, but fences or telephone wires can be used where trees are not available. Breeding can take place between July and March, but most individuals lay between September and January (Tarboton 2001). Urban birds usually breed 1-2 months earlier than their rural counterparts.

Southern Masked Weavers build nests that follow the typical weaver prototype of a ball-shaped nest (dimensions in this species, measured outside: roof to base: 110-140 mm; front to back: 135-150 mm; width 90 mm) with a short (10-25 mm long and 20-23 mm wide) downwards-facing entrance tunnel (Tarboton 2001). The eggs are cupped in a depression and separated from the entrance by a low wall; this design prevents them from falling out in strong winds.

The male builds the shell of the nest and can complete it within a day. He uses long (200-300 mm) green strips of grass, reed or palm and weaves small leaves and fine grass ends into the ceiling (image 1). He also strips the leaves from the branches or reeds surrounding the colony, and this may serve to make the nest more visible to females. The male builds a succession of nests (average: 25, range: 10-52), from which he displays to visiting females (Tarboton 2001).

Once he has attracted a female, she will select one of the densely woven nests and line its inner cup with feathers and soft grass ends. The interval between the start of nest construction and laying can be as short as three days. The male demolishes nests that are not used and replaces them with new ones. Colonies usually breed at the same site in successive years, but do not reuse old nests.

Individual Southern Masked Weavers build nests of low but repeatable morphology, which suggests that they may use a genetic template to construct their nests but that experience and learning are also important (Walsh *et al.* 2010). The

Village Weaver, *Ploceus cucullatus*, whose geographical range covers much of the eastern flank of southern Africa, was not found to build nests with repeatable morphology in the same study. In both species, individual males built shorter and lighter nests as the breeding season progressed.
Females lay 2-3 eggs (range: 1-5; dimensions: 21 x 15 mm) at one day intervals, and the male will add a short entrance tunnel to the nest (Tarboton 2001). Southern Masked Weaver eggs vary greatly in ground colour and markings, and yet individual females lay eggs that are coloured and marked consistently over their reproductive lives. This inter-individual variation could be a counter-strategy against brood parasites, species that lay in the nests of other species and provide no parental care, since variability in egg colouring and marking make it less likely that the parasite's eggs will match the host's and more likely that foreign eggs will be detected. Since parental care is costly to the care-giver (Clutton-Brock 1991), brood parasites profit from letting somebody else do the hard work of raising the offspring.

The nests of the Southern Masked Weaver, as well as the Cape Weaver and a number of other species, can be parasitized by the Diederik Cuckoo, *Chrysococcyx caprius*, a species which has not been sighted at Goegap. It parasitizes at least 24 species, more than any other southern African cuckoo (Tarboton 2001). It removes one egg from the host nest, and lays one of its own eggs in its place. The cuckoo chick usually hatches before the host nestlings and throws the remaining host eggs from the nest.
Incubation lasts for 12-13 days in the Southern Masked Weaver; brooding is 15-16 days (Tarboton 2001). Incubation, brooding and offspring provisioning are carried out by the female, although the male contributes to feeding in some cases. Nestlings are altricial – their eyes are closed and they have little or no down at hatching.
The Southern Masked Weaver is nomadic outside the breeding season. It eats seeds, nectar and insects, and will come to bird tables. It feeds singly or in a flock, and will sometimes form a mixed species feeding group with other seed-eating birds.

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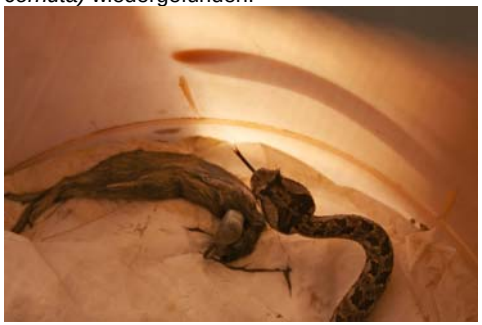
NEWS AND INFORMATION ABOUT PLANTS AND ANIMALS

DIE HÜRDEN EINER FELDSTUDIE

Von Kim Ferrari

Von Juli bis August dieses Jahr habe ich in Südafrika eine Feldstudie mit Striemengrasmäusen durchgeführt. Während 6 Wochen habe ich im Goegap Nature Reserve die Mäuse in ihrem natürlichen Habitat beobachtet. Dies ist aber nicht so leicht, wie ich zu Beginn annahm. Jeweils morgens führte mich mein Experiment zu dem Nest, das ich am Vorabend beobachtet habe. In der Tat könnte man glauben, dass durch die Tatsache, dass viele Parameter schon gegeben sind, die Durchführung erheblich erleichtert wird. So erübrigt sich zum Beispiel mit der Auswahl eines geeigneten Nestes auch die Auswahl der Individuen. Und man muss auch nicht darauf achten, dass - wie in einem Arena-Experiment - jeweils die Gerüche anderer Individuen entfernt werden. Das liegt daran, dass diejenigen Tiere, die sich ein Nest teilen, sich auch gegenseitig kennen und akzeptieren.
Doch es gibt auch Faktoren, die einem nur in einer Feldstudie zum Verhängnis werden können. So zum Beispiel das Wetter, der Tod eines oder mehrerer Individuums oder der plötzliche Umzug zu einem anderen Nest.

So war ich gezwungen, meinen Zeitplan etliche Male neu zu gestalten, weil die Arbeit aufgrund von Regenfällen ausfiel. Das liegt daran, dass die Mäuse bei Regen ihre Nester fast nicht verlassen. Auch wäre es zu riskant Fallen zu stellen, um die Mäuse für das Arena-Experiment einzufangen, da die Kälte und Feuchtigkeit in den Fallen für die Mäuse sicher nicht gut ist.
Im natürlichen Habitat einer Spezies trifft man zwangsläufig auch auf natürliche Fressfeinde. So habe ich ein Individuum beim Tracking im Bauch einer Büschelbrauenotter (*Bitis cornuta)* wiedergefunden.



Büschelbrauenotter (*Bitis cornuta*) mit ausgeworfener Striemengrasmaus (*Rhabdomys pumilio*).

Ein anderes Individuum wurde am Tag vor dem Feld-Experiment vom Schwarzkopfreiher (*Ardea melanocephala*) gefressen. Wiederum eine andere Maus wurde tot in ihrem Nest aufgefunden. Das blöde daran war, dass diese Maus die einzige ihrer Gruppe war, die über einen Transmitter verfügte. Der Rest der Gruppe zog zu einem anderen Nest um und blieb für einige Tage verschwunden.
Für einige wäre das wahrscheinlich ein Grund gewesen, sich zu sagen, dass ihr Experiment in dieser kurzen Zeit nicht durchzuführen sei und einfach aufzugeben. Ich selbst habe aber alles daran gesetzt, verlorene Gruppen wieder aufzuspüren und habe die vormittägliche Freizeit damit zugebracht, Fallen aufzustellen und bestimmte Nester zu beobachten.

Schwarzkopfreiher (*Ardea melanocephala*) auf der Pirsch.

In der kurzen Zeit in Goegap habe ich gelernt, mit Rückschlägen umzugehen und daraus neue Motivation für das weitere Arbeiten zu schöpfen. Auch habe ich gelernt, was einem im Feld für Probleme erwarten und wie ich sie beim nächsten mal besser umschiffen kann: Mit einer guten Zeitplanung, Reservetagen und positivem Denken.

CONFERENCES, PRESENTATIONS AND PUBLICATIONS

PUBLICATIONS

Schradin C, Lindholm AK, Johannesen J, Schoepf I, Yuen CH, König B & Pillay N. published online. Social flexibility and social evolution in mammals: a case study of the African striped mouse (Rhabdomys pumilio). *Molecular Ecology*.

Available online at:
http://onlinelibrary.wiley.com/doi/10.1111/j.1365-294X.2011.05256.x/abstract

Environmental change poses challenges to many organisms. The resilience of a species to such change depends on its ability to respond adaptively. Social flexibility is such an adaptive response, whereby individuals of both sexes change their reproductive tactics facultatively in response to fluctuating environmental conditions, leading to changes in the social system. Social flexibility focuses on individual flexibility, and provides a unique opportunity to study both the ultimate and proximate causes of sociality by comparing between solitary and group-living individuals of the same population: why do animals form groups and how is group-living regulated by the environment and the neuro-endocrine system? These key questions have been studied for the past ten years in the striped mouse *Rhabdomys pumilio*. High population density favours philopatry and group-living, while reproductive competition favours dispersal and solitary-living. Studies of genetic parentage reveal that relative fitness of alternative reproductive tactics depends on the prevailing environment. Tactics have different fitness under constrained ecological conditions, when competitive ability is important. Under conditions with relaxed ecological constraints, alternative tactics can yield equal fitness. Both male and female striped mice display alternative reproductive tactics based on a single strategy, i.e. all individuals follow the same decision rules. These changes are regulated by endocrine mechanisms. Social flexibility is regarded as an adaptation to unpredictably changing environments, selecting for high phenotypic flexibility based on a broad reaction norm, not on genetic polymorphism for specific tactics.

CONFERENCES AND MEETINGS

By Carsten Schradin

In September, Julien Raynaud and Carsten Schradin went to the Institute of zoo and Wildlife Research in Berlin (Germany) to attend a meeting on behavior, physiology and genetics of wildlife. Both gave a talk, Julien about his testosterone implant studies in Goegap and Carsten about social flexibility. It was quite an interesting meeting with a variety of topics, small (maybe 100 people), but still many interesting people to meet.
One week later Carsten went for a few days to the University of Montpellier (France) to give a talk and meet with Guila Ganem, who studies speciation in striped mice. Soon some of Guilas students will come to the research station to learn radio-tracking.

THE 51ST MEETING OF THE ZOOLOGICAL SOCIETY OF SOUTHERN AFRICA

By Ivana Schoepf

In the beginning of July, Ed and I attended the 51st Meeting of the Zoological Society of Southern Africa (ZSSA). The ZSSA is normally hosted by a university in one of the Southern African States. Ed and I had already

attended a ZSSA meeting two years ago in Durban, KwaZulu-Natal. However, for the current meeting we did not have to travel as far – Durban is almost on the opposite side of South Africa for us! – as this year's meeting was held at Stellenbosch University, which is a "mere" 500 km from the research station. This year conference was rather special as it was actually a joint meeting between the Zoological Society of Southern Africa and the Parasitological Society (PARSA), thus the topics presented were incredibly varied and included among others: animal personality, sociality, sexual selection, conservation, host-parasite co-evolution and pest management. This conference was particularly exciting for us as it gave Ed and me not only the opportunity to present our work but also allowed us to see some old colleagues. It was a real delight to be able to hear Sara Henning-Lerch's work. Sara is a former master student of the University of Zurich that is currently doing her PhD in the lab of Prof. Sue Nicolson at the University of Pretoria. It was a particular pleasure also to be able to catch up with Dr. Sonja Matthee and her husband Prof. Conrad Matthee and discuss our work with them. Sonja and Conrad came to Goegap a couple of years ago to trap mice for their genetic and parasitological work. The conference not only gave us the opportunity to meet old friends, but also to make some new and important contacts. Furthermore, while in Stellenbosch we also had the opportunity to visit the University itself as Sonja was kind enough to show us around. Finally, a word must be said on Stellenbosch itself, a beautiful town set in the heart of the gorgeous Wineland Region in the Western Cape of South Africa. The town itself is full of historical sites and the surrounding hills are covered with grapevines and littered with wine estates. As the name suggests, the main product of the area is wine – and cheese! –but both Ed and I are not great wine drinkers, so we did not really get to appreciate the local product very much, but we did get a taste of the local cuisine! The last evening, we attended the closing ceremony of the conferences, which was held at one of the local restaurants, so we had the chance to try the local food. And it was wonderful!

FUNDING OF RESEARCH: CALL FOR DONATIONS

Subscribers donation	Account details
We appeal to all subscribers of the FSM-TIMES to donate 80 Rand (10 Euro, 15 dollars) a year for research on the socio-ecology of small mammals in Goegap. Donations of more than 80 Rand are welcome and donors of 400 Rand (50 Euro, 75 dollars) will be mentioned in the next FSM-TIMES. Donations will be used for the following purposes: 1. Scientific research on small mammals in Goegap, especially smaller research projects such as Diploma and PhD theses, which have difficulties in raising funds elsewhere. 2. Improving the infrastructure of the research station. In the last issue of the FSM-TIMES of every year we will publish how much we received in donations and how the money was used. You can easily donate money online if you have a PayPal account. Otherwise, please transfer money to one of our bank account.	South Africa Standard Bank Branch: Braamfontein Account name: Wits University Foundation Account No.: 002900076 Branch code: 004805 Swift code: SB ZAZ AJJ 00480502 Please state L.2112 as reference. Germany Carsten Schradin, KSK Esslingen, BLZ 611 500 20, Konto Nr. 7434686 Switzerland (deposits in Switzerland) Postkonto 80-643-0 Finanzabteilung der Universität Zürich, 8001 Zürich Reference: Kreditnummer 37191503, Projekt Striemengrasmaus (it is very important that you state the Kreditnummer) Switzerland (deposits from abroad) Zürcher Kantonalbank, Hauptsitz, CH-8010 Zürich Account No: 1100-0109-594 (BC 700) Finanzabteilung der Universität Zürich, 8001 Zürich Swift-Code: ZKBKCHZZ80A IBAN: CH51 0070 0110 0001 0959 4 Reference: Kreditnummer 37202508, Projekt Striemengrasmaus (it is very important that you state the Kreditnummer).

THE MOUSE'S TAIL

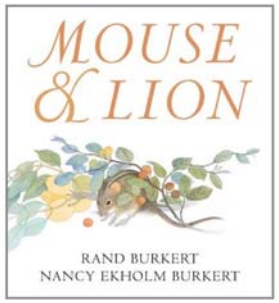
SOMETHING IS LURKING IN THE SHADOWS

For the past few nights, while out doing sleeping sites, the field assistants have heard noises and steps coming from behind them. Thus, they have become convinced that something is stalking them. Initially we suggested it could be either a wildcat or a caracal, as a lot of remains of small animals have been found in that area. However, as nobody yet has caught even a glimpse of the creature, the mystery and the legend is growing (including the size of the animal!). Let's hope then that the puzzle will be solved soon as this is already turning into a case for Mulder and Scully and could soon become Goegap Bigfoot.

A GEMSBOK GETS LOST

This year the flower season has been lovely. The field is green and the flowers are in full bloom. It is indeed a rich time for the reserve and for the animals that inhabit it. Thus, one would expect the animals to be happily eating away the fresh green plants and drinking from the many water pools scattered around that still remain after the last rain. However, one cannot please everybody and one lost gemsbok one night decided that the grass looked greener inside the research station area. Thus, he climbed over the fence and went to drink from the tiny waterhole that we keep in our front garden for the birds. To do so he went through the whole process of jumping over the fence and making a great deal of noise!

STTRIPED MOUSE AND LION



The famous tale about mouse and lion has been retold, and now it's the striped mouse who meets the lion. The world-famous artist Nancy Burkert found our homepage and decide that's the correct mouse for the tale. The drawings are just beautiful, the story told better than ever. The book is available at Amazon for 12 US $.

GOLDEN MOUSE PRIZE-WINNERS

2011: BRIGITTE SCHRADIN

2010: VOLUNTEER FIELD ASSISTANTS

2009: DR. URS THALMANN

2008: KLEIN GOEGAP

2007: GOEGAP NATURE RESERVE

2006: DR. GUSTL ANZENBERGER

2005: JENS SCHRADIN