

FSM-TIMES

FourStripedMouse

Title: The black-backed Jackal



Golden Mouse awarded to Goegap Nature Reserve

Reports by students

Golden Mouse awarded to Goegap Nature Reserve

Mouse portrait: Female 892

Gecko portrait: Rough-scaled gecko



Received:

Grant from Holcim Foundation

IMPRESSUM

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WELCOME TO THE THIRTEENTH ISSUE OF THE FSM-TIMES!



Many things happened during the last three months. The flower season begun and we had a spectacular flower display and good plant growth due to good winter rain. Lots of new mouse food, but the striped mouse population declined dramatically. This was mainly due to the guy from our title story: At least every second mouse died because of predation, many were eaten by jackals. Still, the breeding season started and the striped mouse population is recovering. However, we had no rain at all in September and we have to wait and see what that means for the mice. If the breeding season is shorter than normally the population might not increase so much. Our research goes on and we got an important grant from the Holcim

Foundation in Switzerland. However, other grant applications were not so successful. Unfortunately, we did not manage to obtain a grant for Ivana Schoepf to do a PhD on the ecological and physiological reasons of social flexibility in the striped mouse. Still, Ivana already started her project and we submitted two revised proposals hoping to get funding for her from June next year on. Until then we are looking for a sponsor who would be willing to support Ivana with a grant to cover her living expenses of approximately 500 Euro /month. If you can help or know somebody who could, please let us know.

Kind regards,

Carsten Schradin

THE DIFFERENT PLACES AND LOCATIONS

South Africa
As the name says, it is the most southern country in Africa. South Africa lies at the Cape of Good Hope. The population of South Africa (40 million) consists of black South Africans (e.g. the Zulu), which represent 75% of the population. 12% are white, 8% coloured, and some are Indian, Malaysian or descendents of the San (bushman). South Africa is the only industrialized country in Africa with a very good infrastructure.

Succulent Karoo
It describes a special vegetation type. It receives low rainfall in winter and is characterized by dwarf succulent shrubs and an amazing wildflower display in spring. It is a desert to semi-desert environment. Succulent Karoo is found in Namaqualand and southern Namibia. In the FSM-TIMES, the words succulent Karoo and Namaqualand are often used as synonyms.

Namaqualand
It is situated in the northwest of South Africa, between Cape Town and Namibia. Famous for its wildflower display in spring, Namaqualand was one of the world's most important copper mining areas at the beginning of the 20th century. Nowadays the diamond mines are more important. Because of its dry desert like climate, agriculture is mainly absent and population density low. Namaqualand is part of the Northern Cape Province.

Springbok
It is the capital of Namaqualand. Although Springbok has only around 20 000 inhabitants, it has shops for nearly everything, including two well stocked supermarkets. At weekends Springbok is very busy, when all Namaqualanders come here to do their shopping.

Goegap Nature Reserve
Pronounced as "Guchap", this nature reserve lays only 20kms outside of Springbok. In spring it is visited by thousands of tourists that are attracted by its wildflower display. During other times of the year it is very quite and mountain zebra, gemsbok, springbok, aardwolf, mice and mice researchers live in peace.

Field Site
This is the place in nature where the scientist collects his data. So our field site is where we observe the mice

NAMAQUALAND-WEATHER

By Carsten Schradin

| The last three months | July | August | September |
|-----------------------|------|--------|-----------|
| Minimum temperatures | | | |
| night | 2.1 | 0.1 | 1.4 |
| day | 13.5 | 9.0 | 10.7 |
| Maximum temperatures | | | |
| night | 12.5 | 11.3 | 20.3 |
| day | 24.6 | 26.6 | 34.7 |
| Nights with frost | 3 | 4 | 2 |
| Rainfall in mm | 32.9 | 27.3 | 0 |
| Days with rain | 10 | 6 | 0 |



THE PEOPLE IN GOEGAP

By Carsten Schradin

Beginning of July Dana Weldon and David Lehmann arrived at the Research Station to work as field assistants. Both of them were already very experienced in field work and soon they worked very independently, being great help. Dana will stay until middle of

December while David had to leave end of September. But he was so impressed by the striped mice that he wants to enrol at the University of Zurich and do a MsC project about them. So probably we will see him again in Goegap in the not so far future.



From left to right.: Dana Weldon (field assistant), Brigitte Schradin (first lady), Gaby Schmohl (MsC student), Carsten Schradin (project leader), Apollo Schradin (field toddler), David Lehmann (field assistant), Ivana Schoepf (PhD student), Maarten Bleeker (research station manager).

Middle of July Gaby Schmohl arrived, a MsC student from the University of Zurich. Gaby will stay until the end of February and study the factors that influence home range size in female striped mice. In middle of August Ivana came back after spending 6 weeks in Europe. She started her own project on a neighboring farm, studying the ecological reasons and physiological consequences of group-living. She was very disappointed when three grants were rejected such that she did not get a scholarship for a PhD. But in the meantime we submitted

two revisions and hope to get a grant for her latest from June 2008 onwards. For the time until then we are looking for a sponsor who is willing to support Ivana such that she can continue collecting field data for her PhD.

End of September Missange van de Sand arrived, a biology student from the University of Konstanz (Germany). Missanga will stay until the middle of December as field assistant. She wants to learn more about animal behavior and find out whether this is the field she would like to graduate in.



Missanga started radio-tracking and collecting data the 2nd day she was in Goegap!

A VERY UNORGANIZED ARRIVAL

By Dana Weldon

I sat there at the internet port sending out my last goodbyes and 'see yas at xmas' messages with the smell of burning still wafting through the terminal building. For those of you living in the UK and not under a rock will have heard about the Cherokee jeep that crashed through the entrance doors of Glasgow airport, this tragic incident occurred 2 days before I was due to fly out to Cape Town via my home town of Glasgow. At first I had felt panicked but that surprisingly quickly drifted into calm as I watched the news bulletins and prepared to go out with a friend. I figured if there was no plane waiting then there was no plane, there really wasn't much I could do about it. But I guess that's just me and its not that I'm a calm relaxed rational person, not at all, I am just completely unorganized and find myself just drifting along with it as there are no other options.

At the airport not much seems out of the ordinary if you of course ignore the big cornered off section at the door and the smell but other than that it's like every other hectic airport. I go up to the desk and enquire as to whether or not my flight is checking in given that I am 2 hours early for their 'be here 2 hours early policy' but they are. So 18 kilos lighter and a Starbucks later I'm convincing my dad that I can go through security without him having to wait just incase. Despite all the hoo-ha it takes me 15 minutes to

clear security. After a flight delay of an hour I arrived in London. I strolled through arrivals at top speed and headed through the airport to the very back wall just hoping that SA airways hadn't moved its desk since I was last there. I handed the woman my ticket and enquired about delays, I had an hour to finish check-in and clear 3 rounds of security. Then 'Miss your return date is for more than 3 months, that's out with the visa parameters'. For the first time since hitting the airport I'm in a panic. I quickly explain that I'm extending it and that I'm a scientist, she looks skeptically at me 'can you prove this?' I sigh with relief and hand over my reference letter from Carsten, after checking with her boss I was off again. 58 minutes later I was at my gate (I think I set some kind of record) at 9 however I was still at the gate. Eventually the plane started boarding and an hour later 45 of our passengers were still held up at security.

I rush out into the cool air conditioned arrivals of Cape Town international airport to find the only organized part of my trip so far waiting (incidentally I didn't organize it), a man with a smiling face was holding a nice little board with Miss Weldon written on it. I apologized for the delay as my driver joked that I look too young to be a scientist. A few days later David and I realize that we have no clue at all how to get to Springbok. Okay well we knew

there was a coach and some taxi bus thing but beyond that no. Our host at the Eagles nest guest house gave us some names and happily let

us trawl the internet for a plan. Fortunately for us there was space left on a coach leaving Cape Town for springbok the next night.



Dana is radio-tracking

At roughly two in the morning our luxury inter cape coach came to a halt, out the window across the isle I could see a petrol station of some sort and pondered to myself whether this was another break on the long road to Springbok or Springbok itself. But the sound of luggage being hauled out the coaches' trailer made me realize that it was the latter. I grabbed my bag and headed down stairs to find out for sure. And yes we were there although I wasn't sure where, where was, up from the petrol station there was a row of buildings closed up for the night then nothing. I asked a woman if she knew of anywhere me and David could spend the night but she didn't. So there we

were left in the dark in the middle of the night with no idea where we were supposed to go, one couldn't help but laugh at the ridiculousness of the situation. It drew me back to the time me and my friends showed up in Edinburgh for the Halloween weekend without the address or even the name of our hostel. But as with then there was a solution, it was a chance encounter, a fluke, a coincidence; call it what you want but it was our savior. There was another lost traveler on that coach, a Belgian by the name of Nicko who just so happened to be sitting next to a girl whose father had come to pick her up as they lived in Namibia. Now this kind man offered to give the 3 of us a

lift into town. Once in the small town we made our way into the 2 star Springbok Hotel up to a rather stunned night receptionist whom I suspect had planned on settling into an undisturbed night of TV. And again luck was on our side and probably the fact that it was the quite season there were enough rooms available for us. My room also had a lovely view of the rocky hills behind the alley and the invigorating aroma of fresh paint but what does one expect at two in the morning. The next morning we headed out for Breakfast at Titbits. The sun was shining and the town looked a lot less intimidating than it had done the night before. On the advisement of our waitress we headed over to a collection of minibus taxis situated behind a row of tourist stalls. The first driver wasn't sure about his English or ours and sent us of to another driver who sent us to another drive until we got told that none of them were going out to Goegap at all. 'Great' was my thought 'we are yet again stuck high and dry'. When asked how we should get there a driver suggested going to the police station and asking there to call the reserve to see if they could send someone to get us. So off we headed with our 20 kilo rucksacks and hand baggage in the rough direction of the police station. When there the officer got a little confused with my English and though I was asking him for a lift and when he seemed happy to oblige I

thought why correct a good thing. So a few days into my stay in South Africa and I was already being carted off in my first police car; wouldn't mum be so proud of me. We where soon on the road out of town past the tiny airstrip of an airport and through the front gates into a new world. I couldn't hide the smile as I saw for the first time in 3 years Springbok and Oryx running round freely. The police officer who had said little except to point out the airport dropped us off at the office and left after our gushing appreciation of his hospitality which he seemed to shrug off as part of the job. Entering the office we once again found ourselves stranded, as Carsten had expected us the day before there was no-one waiting and our police car was half way to the gate. We were facing a 5km walk, but fortune for some as of yet unknown reason Lady luck was still smiling on us; the stand-in manager kindly piled our bags into the back of her truck and we where on the road again. Walking cautiously into the research station we where met with the glad faces of Carsten, Brigitte, Maarten and a rather excited baby Apollo. Setting my bags in my new room I sighed with relief, we were finally here safe and sound at Goegap Research station. The ironic thing was that 2 hours later we were back in Springbok doing some essential food shopping.

A LITTLE FRENCH SCIENTIST ADVENTURER IN SA

By David Lehmann

I was really excited to come to South Africa. After one year of exploring North America, I wanted to see another continent. Travelling is essential in my way of life, but I want to travel for a good reason. With my passion for evolution and behavioural biology, I can combine travel and science. I knew I had to be careful in South Africa because life has not the same prize here. I had my laptop in my road bag, and the perspective to lose it or somebody stealing it was worrying my mind. When I arrived at Johannesburg, I learned what it is to be the only white guy in the street at 4 am. I had a bit of time before my second plane left for Cape Town and I wanted to stretch my legs a bit. Turned out that it was not a good initiative, because after 100 meters from the airport, I noticed some guys were looking at my bags. I have good experience with different types of people but I don't know anything about the Africans. I returned to the airport and waited patiently with a coffee.

I arrived in Cape Town in the morning and took a taxi to the center of the city. I was looking at the road side. And I saw a lot of peccary buildings and at this moment I knew I was in a different world. I have already seen this type of periphery town in Guadeloupe, but they are more pronounced here. In the center, I walked a bit with my bags

and I met some funny guys who asked me where I came from and where I was going. It was really difficult to understand them. I need to improve my English. Finally I joined Dana at the hotel; although it was a bit difficult because I didn't

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 info@stripedmouse.com. Please write a short motivation and attach a CV. You will then obtain more information.



remember the name of the hotel. Sometimes my head is on the moon. My driver was really friendly; and told me the differences between the white girl and the black girl. First I believed he spoke about the apartheid. He said he prefers the white, I said to prefer the

chocolate/coffee. When he heard my answer, he started to laugh. His laughter was really amazing and I started to laugh too. Afterwards, we had a good discussion about it. It was my first real conversation with a local guy and it was really funny. With Dana we tried to go to the top of Table Mountain but the wind was too strong for the cableway. Instead we went for a hike around Table Mountain and saw a lot of beautiful plant species I have never seen before. It was good to walk after the long trip. The second day, we took the bus to Springbok. I was a bit disappointed because the travel was by night and I wanted to see the area we drove through. We arrived at 1 am in Springbok and we met a Belgium guy who was going to Namibia. We were dropped by a cool dad in the center of the city to find a hotel. The next day, we had to go to Goegap. But first we spent some time in Springbok. I was really impressed by the breakfast of Dana as I never eat a lot in the morning. It was funny to see the differences between the two cultures (I am from France and Dana is from Scotland). With the daylight, I saw the view and the geology of this place. The rocks have the same color as the sand, in reality the sand was rock in the past. And the succession of the cold nights and hot days broke them, sometimes in a real straight piece. The vegetation was new for me; I have never seen the Succulent Karoo type, with these bushes and these little trees (Aloes). We needed to find a taxi, but we didn't find one. We asked a policeman what we could do to get to the Reserve. Surprisingly, he

proposed to drive us to the reserve's office. First, I did not really agree with that in my mind, because we have just a tourist visa, and nobody was supposed to know that we came here to work. Secondly, I have a little apprehension for the police. I suppose it's because in my country we have recently some problem with them => "Sarkozy's State" (new French president). But the guy was a good guy, not a lot of questions, just cool. At the gate of the Reserve, I saw some mammals, far away. I took a bit time to understand it was the Springbok and the Oryx. Great! First time...! I was really happy! Finally we arrived at the research station and we met Carsten (the godfather), Brigitte (first lady), Apollo (prince of Goegap) and the Super(visor)Man: Maarten. During my first nest observation, I saw a little mouse with a blond head, she was very cute and she liked the peanut butter very much. I like it when the mice are basking, they are funny in the sun. The first mouse I trapped bit me, small teeth but good pain. I understand that, is not really funny to be manipulated. As for the radio tracking, after 2-3 days of practice, I was good. I understood the techniques and now I like that. It felt good to walk alone all the day in the field, and to see the little mice looking at you. I was really impressed by the cry of the baboon. I wanted to observe more of them. To conclude, I have a really good feeling with this job, I like the team and the work. I'm particularly interested by the hormonal process in the evolution of the paternal care strategy. I ask myself if the presence of the pups

can be considered by the father as a psychological stressor that causes a hormonal response to produce prolactin. And what is the function of this hormone? Prolactin could either cause paternal care or just suppress

the action of testosterone (e.g against infanticide)? Those are my main question (+other things) for this moment and I have to read a lot about this subject.



David had a hard time beating Apollo in Darts!

FIRST IMPRESSIONS BY A SWISS MSc STUDENT

By Gaby Schmohl

Almost one year ago I asked Carsten doing my Master Thesis („Factors affecting home range size of female striped mice“) about the Striped mice in Goegap. That means enough time to organise all the important things in advance, such as visa, vaccination and some other stuff. Before leaving Switzerland I was mostly afraid of losing my laptop or digital camera in Cape Town. To feel safer I booked

my backpacker and the transport from the airport there from home. Nevertheless, I felt queasy leaving Switzerland. This is the first time for me travelling alone and I couldn't really imagine how I would feel to be such a long time so far away from my boyfriend, my family and colleagues. I arrived in Cape Town at 7:30 p.m. after a 24-hour trip. As soon as I got

off the plane I realized that I'm back in winter. And I missed the first time my country Switzerland with its warm and nice summer weather the days before my departure. In the arrival hall at the airport of Cape Town I must looked like a completely lost tourist. Maybe that's the reason why a man of a transport company offered me his help. But I told him that I had already organised my transport to my backpacker. "No", he said, "they won't give you a lift after 8 p.m.". Hopefully he is wrong, I thought and internally cursed what the hell I am doing here! But I don't give up so quickly. "Somebody" must have heard me and told the lady at the information desk to call my name...This lady informed me about the delay of my taxi driver. I was really happy to hear that. From now on everything went perfect, so that I could soon fall asleep in my bed. I spent 2 fantastic days in Cape Town! I was really impressed by the landscape around this big City. Watching the whales in Hermanus was so amazing! But I had to go to Goegap or shall I say "from the big mammals to the small mammals"? For fear of missing the horn of my taxi to Springbok in the middle of the night, I couldn't even close my eyes. Pick up time was something between 3 and 5 a.m. Great! You have to get up at 3 a.m. and will be picked up at 5 a.m. Luckily, this was not the case. During my 60 minute wait I enjoyed some chips and a diet coke. Before lunchtime I arrived in Springbok and couldn't really believe that they call this place a town. I told my driver that I have to go to Goegap Research Station, but it seemed that nobody felt responsible for me. After

switching twice the taxi and waiting at least one hour, I was again on the road. I was pretty sure that everybody here in Springbok knows where the Goegap Nature Reserve is. However, my driver had no idea. Other people helped us to find the right way. I arrived in my new home for the next 8 months. I met the Research Station Manager Maarten and the 2 field assistants Dana and David. I was privileged to do nothing at the day of my arrival. I only had to observe how the others are working and cleaning traps. The next day our trip to Springbok to do some shopping started like a bad joke. After driving a few meters the car broke down and couldn't be restarted again. As nobody of us is a car mechanic someone had to ride by bike to the office and ask for help. Finally, with a "delay" of at least 90 minutes nothing else could stop our lovely car. Our first stop was at AutoMac to fix the car and I have the feeling that this will always be a part of our weekly shopping trip. During the following days Maarten was so nice to introduce me to the field work. Watching him handling the mice looks really easy, but it isn't. I was far away from being successful in handling them. The first 3 mice bit my thumb or escaped due to my inability. I am a fighter and I don't give it up that soon. Once I got the hang of it – like Maarten loves to say - holding the mice in my hands is a beautiful experience. Nest observations in the morning and evening are amusing. It is really funny to see the fights for the best piece of peanut butter on the scale. If it is boring a jackal will visit you and chase your mice. During an

observation a jackal was 10m away from my chair looking for some dinner. I was worried about my little nice mice. Luckily he wasn't successful, so he went away. On Sundays I go hiking together with David to explore the landscape of this nice reserve and see some other animals (Gemsbok, Springbok,

Baboon, Spotted Eagle Owl, Cape Mountain Zebra...) than Striped mice, Bush karoo rats and Elephant shrews. I have a really nice time in Goegap, although it is a little bit (very) cold at the moment. I'm looking forward to the oncoming months, especially the flower season.



Gaby is doing a plant survey in the home range of a female striped mouse.

Goegap Nature Reserve

Accommodation: Guesthouse, bush hut, camp site.

4x4 routes, tourist route for all cars, two hiking trails.

Tel: +27 27 718 99 06

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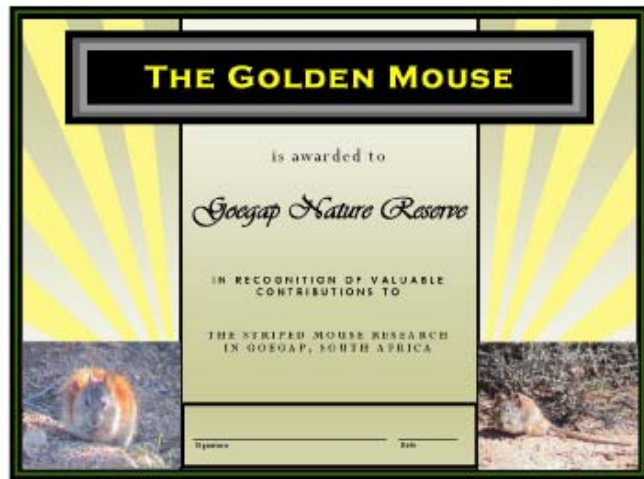
HOMEPAGE: STRIPEDMOUSE.COM

By Carsten Schradin

| | July | August | September | Total last quarter |
|----------------------------------|------|--------|-----------|--------------------|
| Visits of stripedmouse.com | 3050 | 2239 | 1724 | 7 013 |
| Downloads FSM-TIMES, SGM-Spiegel | 1242 | 808 | 850 | 2 900 |

GOLDEN MOUSE AWARDED TO GOEGAP

By Carsten Schradin



This year the Golden Mouse was awarded to Goegap Nature Reserve.

We are very grateful to Goegap that we can conduct our research there

and that the nature reserve provides us with a house as research station. Since 2001 we study the striped mouse in Goegap and we received significant help both from the management as well as from the workers of Goegap. We hope we can continue our research for many years to come.

The golden mouse was handed to the reserve manager Maxie Jonk on the 13th of August. For the occasion we (that is mainly Brigi) made a Potjie for the workers of Goegap, a South African dish cooked for hours in an enormous pot on the open fire.



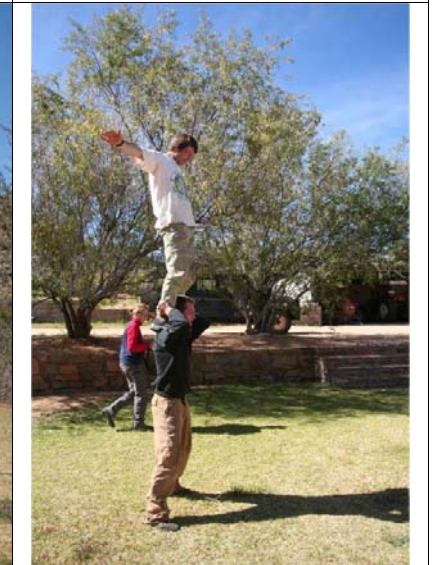
Brigi cooks the Potjie



The workers wait for the food to finish.



Maxie Jonk, the reserve manager, gets the Golden Mouse from Carsten.



David (bottom) and Maarten (top) entertained us with acrobatics.

TITLE: THE BLACK-BACKED JACKAL

By Maiia Olsen



A jackal, clearly showing his black back!

The climate in Goegap is characterized by a cool and rainy winter, plenty of plant growth and a long dry and hot summer from December to April. Towards the end of the dry season very little food is left for the mice and, based on personal observations, the mortality rate is high. Most of the mice are very skinny as well, and all of the Succulent Karoo seems to be holding its breath, waiting for the rain to come and bring back with it new life.

This high mortality rate can not be contributed to the lack of rain alone though. At least not always. This year we had a breeding pair of jackal buzzards as well as several owls, mongooses, African wildcats, snakes and a black backed jackal doing their part at OUR field site.

Until the day the jackal moved in, the only sign of them, that I knew of, was their “yelping” at night. Then, one morning as I was observing a group of mice, I saw the jackal in the field site, eagerly jumping around to catch

something, probably mice... It seemed he had no luck, as he moved further down, towards where I was sitting. It wasn't until he was almost next to me that he saw me (so much for animals and their 6th sense) and froze. I was sitting on the ground, and he looked like he was assessing how dangerous – or tasty – I was. Finally he decided I might be a bit too big and moved on, but he has lived in the field site ever since. Later observations revealed him hunting with a partner, and we hope to see some jackal pups sooner or later, if, that is, they would be so kind as to leave our mice alone.

Description

Being a member of the dog family, latin name *Canis mesomelas*, the jackal resembles a large slender fox, measuring up 40 cm over the shoulder. They reach a total mass of up to 13 kg.

They are recorded to live approximately 8 years in the wild and up to 14 years in captivity.

The ears are big and pointed and the legs are long and slim as typical of desert living animals so as to increase the surface:volume-ratio. As in a fox, the snout is long and pointy. The total body length is app. 150 cm, with the tail comprising about 40 cm of this.

The black backed jackal got its name from the black saddle shaped stripe that runs from the neck down the back and ends just before the tail starts. This saddle is dotted with silvery tufts. The tail is black and bushy with a brown undercoat. The body is tan to reddish-brown, with the lips, chest and dorsal side being

white. All in all this makes for a very handsome and elegant animal, that easily blends into the surroundings here at Goegap.

Distribution and habitat.

The black-backed jackal can be found only in Africa. The species lives in two discrete areas separated by roughly 900km. One region includes the southern-most tip of the continent including South Africa, Namibia, Botswana, and Zimbabwe. The other area is along the eastern coastline, including Kenya, Somalia, and Ethiopia. It is believed that they originally inhabited the area in between, but the current separation has caused further division into two subspecies, *Canis mesomelas mesomelas* in South Africa and *C. m. schmidti* in East Africa.

This jackal is not very particular about its habitat and has succeeded in inhabiting a wider range of habitats and although they do prefer dryer open areas, they can be found in places ranging from the outskirts of small cities to the Namib Desert, including open woodland, scrubland, bush and savannah. They are also found along coast lines, including Cape Cross, where a huge all-year-round seal colony exists. In East Africa it is most often found in intermediate habitat between the savannah and the deciduous forests.

The jackals don't dig out their own dens, but resides in existent holes or burrows, like aardvark-holes.

Diet



The pouncing technique

The black backed jackal will eat pretty much anything from berries and insects through rodents up to small antelope, mainly the young or the sick and weak. It also enjoys a nice helping of chicken-gone-bad (red.) It is a typical opportunist and will eat any cadaver it encounters. Mostly its diet is based on availability, thus in the dry season it will encounter many cadavers of animals that died of thirst and/or hunger and in the wet season in Goegap it will have access to plenty of well fed mice, bush karoo rats, wistling rats, agamas, lizards and other similar animals. It is an able mouse hunter, using the canine pouncing technique, by jumping onto their back with its front paws thus pinning them down. Yet even with access to plenty of carcasses, the black backed jackal has still been observed to hunt living seal pups on the coast of Namibia. If necessary they can live entirely of insects and this highly adaptable behaviour must be part of the reason for the success of the black backed jackal.

Behaviour.

In areas with dense human activity, the black backed jackal is mainly nocturnal, but otherwise it is active

both during the day and night. They are a monogamous species, forming life long pair bonds. Being aggressively territorial, the male and female both mark and guard their territories, always having more aggressive reactions towards intruders of the same sex. In South Africa average home range size is 18.2 km².

The social structure consists typically of a monogamous pair and their young. Although they are territorial, they can from time to time aggregate in groups, cooperating to put down bigger game or around large carcasses, as those put down by lions. Here the jackals communicate by aggressive displays such as snarling and submissive displays such as putting the tail between their hind legs. Other vocal communications are the distinct howl followed by several short yelps, so often heard at night in the Succulent Karoo Research Station. This howl is possibly to let other jackals know that this territory is occupied and to let relatives – mate and/or pups - know where in the territory the individuals are.

The black backed jackal is a curious and intelligent animal, often described as cunning. If scared away, it will often run only a short distance, for then to turn around to investigate the threat further. This is often seen by highly motivated field assistants attempting to chase the jackal away from them (to avoid that jackals find out that there are traps with mice and that field assistants are a reliable sign where to find these traps). Every time you believe that you finally succeeded in chasing it away, it will turn around to check if

it is still being chased (or to take a dump (red.)), forcing the poor assistants to go further away from the field site and their comfortable chairs.

Reproduction.

Reproduction takes place in the dry season, in South Africa from May to August. Sexual maturation occurs at 11 months of age and mating is followed by a gestation period of about 60 days. Litter size ranges from one to six pups, each weighing 200 – 250g. After 60 days the pups are weaned and until the pups can hunt for themselves they are fed by regurgitation by both parents.

Often young from former litters stay with their parents and act as helpers, thus increasing the number of pups that survives. They hunt with the parents, regurgitate to the pups and stay around the den as “babysitters”. As long as they stay around the den, they are kept sexually inactive by aggressive harassing from the same-sex parent.

Threats

Natural predators include leopard, hyenas and birds of prey. In Goegap the jackal is the top predator, and thus has no natural threats.

Interactions with humans

The black backed jackal doesn't mind living alongside humans, although they will avoid any direct interactions by staying nocturnal in crowded areas. In Goegap the interactions with humans inside the reserve is minimal, and they are frequently seen during the day, but will only raid around the houses at night. They thrive on waste as much as mice and will eat most leftovers thrown aside.

Since the blacked backed jackal is fond of small game, sheep and goats are tempting prey. This has caused some complications between jackals and farmers, as individual farms can experience losses up to 18%, caused by the jackal. In addition, the jackals can be infected with rabies, so helping to spread this disease. Farmers try to eradicate the jackals from their areas, by using snares, guns and poison.

The jackals don't make it easy though, and they quickly learn to avoid human made traps. So far they persist throughout South Africa in spite of all attempts to get rid of them, and the black backed jackal is at present time not listed as a threatened species. In the light of this, the black backed jackal can be said to be “the red fox of Africa”.



Jackals can become rather tame, especially when fed by tourists (left). This can become a problem when they lose all fear of humans, e.g. the jackals raiding BBQ sites in Etosha National Park (right).

The black backed jackal in Goegap

Naturally, in areas where they are hunted by farmers, the jackals are very shy, but here in Goegap they aren't especially wary of people. In Goegap the black back is the only type of jackal. At present time it is hard to say how big the population is, the best estimate so far is "many". Since they are not hunted in the reserve, the jackals are very curious about humans. As long as you are not posing any immediate danger, they will come quite close to investigate, even if you are sitting in a big, noisy 4x4, driven by a big, noisy German guy.

The diet of the jackals in Goegap is the same as everywhere else; they eat everything. In the lambing season of the springbok they will gladly take the lamb, and they can also take down a sick or injured springbok (36 – 50 kg).

At this time, the reserve and the surrounding farmers have an understanding, such that each takes good care of the fences, and the jackals in the reserve are not being blamed for any losses in livestock. Losses do occur, though, since the jackals in the reserve probably find a way out still, and a population of jackals outside the reserve does exist.

The jackal is a persistent, highly adaptable and intelligent creature that has proven to be able to persist in so many different habitats, under such a wide variety of conditions, that I can only perceive them with utter awe and admiration. Besides, I think they look very cute. These animals should be respected and further investigation into their role in their ecosystems, in my humble opinion, promises new and exiting knowledge.



A jackal in the plains of Goegap

NEWS AND INFORMATION ABOUT PLANTS AND ANIMALS

MOUSE PORTRAIT: FEMALE 892

By Carsten Schradin

| | |
|--|--|
| Mother: F198 or F746 | Father: M527 |
| Date of birth: 15. February 2005, group 6 | Date of death: Disappeared end of February 2006 |
| Age: 12 months | Cause of death: unknown, disappeared |
| Partners: M651, later M835 | |
| Children: 13 sons, 8 daughters | Grand-children: approx. 14 |

F892 was one of these old matriarchs that spend their entire lives with us. She was used to us and did not know a mouse life without us. She knew us since the day she left the nest of her mother for the very first time, when she was only two weeks old. During nest observations she did not give us more attention than a shrub. She was only interested in the balance with the little piece of peanut butter. This we used to weight her without trapping to find out whether she was gaining weight (being pregnant) and when she gave birth, loosing 20% of

her body weight from one day to another. Thus, we use this technique only during the breeding season, and when we stopped it in December 2005 she made it very clear that she knew that something was missing: She was running around the entire shrub she was nesting in, and when there was no balance, she would run to the field assistant Stella, jumped on her shoe and from there even on her lap, still not finding the peanut butter. She had never before shown a behavior like this; as I said before she rather ignored us. I always say: "They are not stupid, these mice!"

GECKOPORTRAIT: ROUGH-SCALED GECKO (*PACHYDACTYLUS RUGOSUS*)

By Ramona Pötzing

There are three endemic subspecies but only *P. r. formosus* was recorded at Goegap.

Identification: This is an unusual, small, round-bodied gecko. The tail is shorter than the body and is segmented. *P. r. formosus* has large tubercles on the back, but smooth belly scales and its coloration is a brown to reddish-brown on the upper parts. There are also five wavy, pale-

yellowish, dark-edged cross bands. The belly is off-white and lightly speckled with brown. Its tail is broadly banded.

Biology and breeding: It is often found in dry riverbeds, under the loose bark of dead trees and on rock outcrops. When threatened, they arch their tail over the back.

Habitat: Semi-desert and succulent karoo veld.

CONFERENCES, PRESENTATIONS AND PUBLICATIONS

CONFERENCES AND PRESENTATIONS

Ivana, Maarten and Carsten visited the Kimberley Biodiversity Symposium at the 25th of September. Kimberley is the capital of the Northern Cape from which Goegap is a part off. Still, it was 800kms and an eight hours drive through the Karoo. But it was worth going there and meeting many colleagues that do research or are

active in conservation projects in the Northern Cape. Maarten and Carsten gave a talk during the Symposium. Additionally, Carsten gave a public lecture about Namaqualand and the striped mouse the same evening at the meeting of the *Wildlife & Environment Society of South Africa, Northern Cape Region*

Maarten Bleeker: The Succulent Karoo Research Station in Goegap Nature Reserve: Monitoring Biodiversity and Studying Social Flexibility.

Carsten Schradin: An Animal Model to Study Animal's Responses to Global Warming: The Striped Mouse.

POPULAR SCIENCE PUBLICATIONS

Schradin, C. 2007. Väterliches Verhalten bei einheimischen Wildtieren: Weit verbreitet und doch selten. (Paternal care in the animals of Switzerland) *Wildtierbiologie*, 20 pages.

Väter in Nadelstreifen. Ein Herz für Tiere (A hearth for animals, Europes largest animal magazine): Interview with Carsten Schradin about his research on striped mice.

Kraft,U. 23. August 2007. Ein bisschen schwanger (article about fathers and paternity). *Handelsblatt*.

FUNDING OF RESEARCH: CALL FOR DONATIONS

SUBSCRIBERS DONATION

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.

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ACKNOWLEDGEMENTS

We are very grateful to the following people who donated and whose assistance contributed to the continuation of our research project.

Holcim Foundation Switzerland: The Holcim Foundation (from the concrete producing company Holcim) situated in Switzerland, supports the research project "Social Flexibility: Causes and Consequences" from Dr. Carsten Schradin with CHF 19 000 (Euro 11 520). This grant makes it possible to finish important parts of the long term study on the demographic and ecological reasons of social flexibility in striped mice and will be used for the Habilitation of Dr. C. Schradin.

Group Herdtfelder, Germany, visited the Research Station and donated R 600.
Thank you very much !

THE MOUSE'S TAIL

OF MICE AND ANTS

When Gaby put the feeders out, filled with hamster food that is accessible to rodents but not to birds, to study in how far this influences home range size in female striped mice, she did not expect to start caravans running over the field site. But many feeders are

not only visited by mice, but also by hard working ants, carrying sunflower and maize seeds on their back to their burrows. But the experiment lasts only three weeks, and then mice and ants will have a harder time again to find their food.

APOLLO'S SECOND YEAR IN GOEGAP



Apollo with mouse on his head (left) and gecko on his hand (right).



Apollo is now 18 months old and already the second time in Goegap. He loves to run around in the field and meet all these interesting animals. He can already say *gecko*, *Eidechse* (=lizard), *Strauss* (=ostrich)

and many more animal names. However, he also knows the student's names, but as there are more different animals than students, he knows more animal than human names.

ORYX POPULATION IS RISING

The last few years had rather good rainfall and the oryx population is steadily growing. In the meantime it is not unusual to see a herd of 50 oryx or more in Goegap. However,

soon some of them will be removed and exchanged with South African National Parks for reedbuck, a new species for Goegap.

SGM-SPIEGEL

The FSM-TIMES is also published in German, as the SGM-SPIEGEL. If you would like to receive the German version, write an email to: info@stripedmouse.com, please write „SGM-SPIEGEL Abo“ in the subject of your email

GOLDEN MOUSE PRIZE-WINNERS

2007: GOEGAP NATURE RESERVE

2006: DR. GUSTL ANZENBERGER

2005: JENS SCHRADIN