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Editor: PJ Stephenson

Message from the Chair

Galen Rathbun
Chair, IUCN/SSC Afrotheria Specialist Group

A year has passed since our last newsletter, but this does not reflect a lack of interest or activity by our specialist group members. The first order of business for our members must be earning a living. For most of our members this involves working at a university, but others toil in the hidden catacombs of museums or in the nerve centres of international conservation organizations. We all serve on our specialist group as volunteers, fitting and juggling IUCN activities in with our normal lectures, scientific paper writing, public outreach, and fieldwork. Our success is the result of dedication, expertise, and a gracious gift of precious time. Despite demanding schedules, we should all be proud of what our specialist group has accomplished in a relatively short time.

During the last year, in addition to providing various organizations with information related to the Afrotheria, our members have done an outstanding job of advancing the Global Mammal Assessment (GMA) pro-ject (see more at the IUCN website http://www.iucn.org/themes/ssc/programs/gma/index.htm). This has required that the status of each of our species be carefully evaluated in terms of their biology and conservation. As our editor, PJ Stephenson, prepares this issue of *Afrotherian Conservation*, the assessments for the aardvark, sengis, and golden moles are completed. The tenrecs will be finished soon, after the assessment of the three African species and a review of the Madagascar species during a workshop this April that will focus on the island's mammals. The hyraxes should be completed by the time you receive this newsletter. It is then up to the GMA staff to incorporate our effort into the entire database.

Our specialist group's website (http://www.calacademy.org/research/bmammals/afrotheria/ASG.html) has also been the focus of some of our members. Link Olson is working on tenrec material, while Nigel Bennett and Serita Maree are assembling information on golden moles. Once this material is compiled, and our Web Master Erik Seiffert adds it to our website, the last two gaps will be filled and a click on any of the home page photos will lead to additional information. In the meantime, I have updated the sengi material with some information on the taxonomy and distribution of giant forest sengis in Tanzania. As soon as all our GMA evaluations are finished, we will update the taxonomy section to include the latest IUCN Red List assignments. If there is any doubt about the popularity of our web site, do a Google search for "Afrotheria.". Our site is on the top of the resulting list, indicating that the information we are providing is being used by a lot of people.

The big news, however, is the recent success that our group has had in raising research funds. Congratulations to Nigel Bennett and Sarita Maree on receiving support from the Chicago Board of Trade Endangered Species Fund for their project "The ecology and population genetics of the critically endangered golden mole *Neamblysomus julianae* (Afrosoricida; Chrysochloridae) from South Africa." Also, Link Olson and Jonathan Benstead just received funding from the National Geographic Society for their project "Distribution, conservation status, and molecular phylogeography of Madagascar's web-footed tenrec (Tenrecidae: *Limnogale mergulus*)." Well done!

In closing, I want to thank our specialist group members again for their continued commitment and contributions – your expertise and time are helping us to accomplish our goals.

G.B. Rathbun
Cambria, California. 16 March 2005

INSIDE THIS ISSUE

Species Profile:
The rough-haired golden mole *Chryospalax villosus*

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The rough-haired golden mole (*Chrysospalax villosus*), endemic to South Africa, has a distribution that is characteristically disjunct with records from a number of provinces including the Eastern Cape, KwaZulu Natal, Gauteng and Mpumalanga (Plate 1). Despite its relatively wide distribution, this species is rare because of its very specific habitat requirements, and it has thus far been caught at only ten localities. It frequents grasslands and meadows in the savanna and grassland biomes of South Africa, and is extremely secretive. Detecting the presence of rough-haired golden moles is made all the more difficult by their preference for areas with sandy soils and dense vegetation, normally close to watercourses.

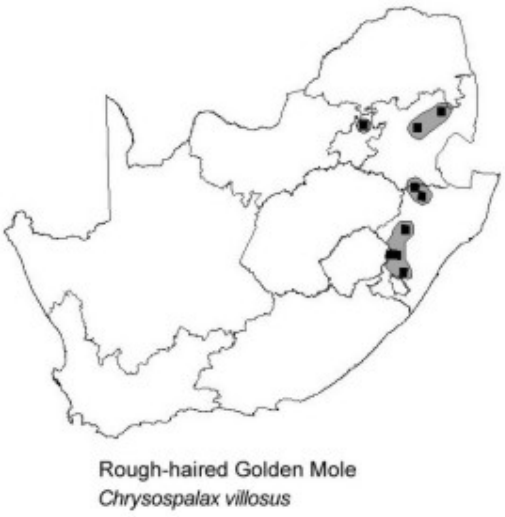

Plate 1: Map of South Africa showing distribution of *C. villosus* (with permission of M. Keith).

The rough-haired golden mole is generally larger than most of the other species of golden mole, with a total length of 120-175 mm and a mass of 90-160 g. It characteristically has a coarse and long pelage with hairs 18-20 mm long on the back. The glossy individual hairs of the guard coat on the mid-back are slate-grey at the base with reddish brown to brown at the tip. The under fur is woolly and grey (Plate 2). The claws of the third digit on the front feet are powerful and about 1.6 cm in length (Skinner & Smithers 1990).

Despite being the second largest of the known species of golden moles, to date there is a paucity of information about the general biology of this secretive and elusive animal. Rough-haired golden moles are rarely seen, despite them coming onto the surface at night to root for their food. Their burrow systems open to the surface via a number of ovoid holes that resemble the holes of freshwater crab chambers (Plate 3). These openings often are filled with shallow soil tailings (soil that has been displaced to the side and back), also similar to those of crabs; sometimes a shallow depression is also found at the burrow entrance, and possibly serves as a latrine. The tell-tale indicators of rough-haired golden moles are rootings made by the leathery nose pad during nocturnal surface foraging bouts. These signs resemble a scuff made by the edge of the heel of a shoe that has been dug superficially into the soil, and are usually located very close to the open holes. In wet soils the imprint of their feet can sometimes also be seen.

Plate 2: Head of a rough-haired golden mole emerging from its burrow

Surface foraging and activity usually follows a period of rainfall. It is not known if these moles also forage in underground tunnels like other golden moles, but this seems likely given the long periods without rainfall during the dry winter months throughout most of its range. The diet comprises insects and earthworms, but has not been well documented. It is possible that they are generalists that will take any invertebrate or even small vertebrate prey they come across, as is the case with the giant golden mole, *Chrysospalax tervelyani*. If disturbed when on the surface, rough-haired golden moles quickly retreat back to the safety of the nearest burrow, and they apparently have a remarkable ability to retrace their steps even under the cover of darkness.

The conservation status of the rough-haired golden mole is of considerable interest to the IUCN/SSC Afrotheria Specialist Group. It is currently categorized as vulnerable with the red list criteria of B1 ab (iii) +2 ab (iii) (due to the species being known from no more than ten localities, the extent of occurrence being less than 20,000 km², the area of occupancy less than 2000 km², and continued loss of habitat). The distribution of this golden mole has probably contracted during historical times as a result of habitat alteration associated with mining, power generating plants, as well as urbanization and ecologically unsound agricultural practices in parts of its range. The greatest degradation of its preferred habitat has taken place in the highveld grasslands of Mpumalanga and Gauteng, as a result of mining shallow coal deposits to fuel the numerous coal fired power stations in this region. Rehabilitation of these sites has largely been ineffective in

restoring natural plant and animal communities. These power stations form the backbone of South Africa's electricity network, so the magnitude of disturbance is likely to increase as human populations grow and the demand for power increases.

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Plate 3: A rough-haired golden mole burrow

The widespread practice of allowing cattle to graze in marshes and dense grasslands near water during the dry winter months leads to the trampling and destruction of pristine habitat that is so crucial to the existence of the rough-haired golden mole. Some historically renowned sites for the mole have been completely transformed by urbanization, such as the greater Pretoria West region of Gauteng where extensive searches for this species over the last 10 years have not yielded any sign of their presence.

The Gauteng, KwaZulu Natal and Mpumulanga provincial conservation departments are currently attempting to document and record potential habitat sites that may support rough-haired golden mole populations. There is major concern by these bodies that this mammal may be more threatened than its red list status suggests. The rareness of the species is exemplified by the fact that the capture of one individual in the Glengary region of KwaZulu-Natal in 2003 was the first specimen recorded since 1974, nearly 30 years ago!

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Article:

Some ecological and behavioural notes on the shrew tenrec *Microgale* cf. *longicaudata* in the dry deciduous forest of western Madagascar

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The long-tailed shrew tenrec *Microgale* cf. *longicaudata* belongs to the subfamily of spineless tenrecs Oryzorictinae in the family Tenrecidae (Olson & Goodman 2003). Whereas most shrew tenrecs are confined to the humid eastern forests of Madagascar, some species, such as members of the *M. longicaudata* complex, are also known to occupy drier areas in the western forests of Madagascar (Ade 1996, Jenkins 2003). *Microgale* represents the most speciose genus of mammals in Madagascar (Goodman *et al.* 2003, Jenkins 2003). New species continue to be discovered. For example, the number of long-tailed shrew tenrecs has recently doubled (Jenkins & Goodman 1999, Olson *et al.* in press). Consequently, information on the ecology and behaviour of some species is still very limited or based on interpretations of their morphology (Ade 1996).

Microgale species are generally thought to forage on the forest floor but also sometimes along inclined lianas and low bushes (Eisenberg & Gould 1970). For example, *M. brevicaudata* is able to climb up vertical lianas at a considerable speed and forage within dense horizontal sheet spider nests up to 4 m above the ground (Hilgartner unpublished data). In *M. longicaudata* some morphological characters, such as elongated hind feet and digits, as well as a very long tail with a prehensile tip, hint at a scansorial or occasionally arboreal way of life (Thomas 1918, Jenkins 2003). However, specimens of *M. longicaudata* were captured in traps both on the ground and at a heights of between 1 and 2.5 m, suggesting occasional terrestrial, as well as arboreal, behaviour (Ade 1996, Goodman unpublished data cited in Jenkins 2003).

Shrew tenrecs mainly forage on insects and *Microgale* species held in captivity have generally preferred prey such as orthopterans (Stephenson *et al.* 1994). The most commonly consumed prey type found in the stomach contents of *M. longicaudata* on the east coast were Orthoptera (Soarimalala & Goodman 2003). An analysis of stomach contents of *Microgale* cf. *longicaudata* captured in the Kirindy Forest in western Madagascar revealed also various remains of arthropods (Ade 1996). Here I add some observations on the behaviour and ecology of *Microgale* cf. *longicaudata* found in western Madagascar.

Research site: Kirindy Forest is a dry deciduous forest in western Madagascar, 60 km north-east of Morondava (44°39'E, 20°03'S). The capture site was in a forest block known as N5 which is located within a 12,500 ha

concession of the *Centre de Formation Professionnelle Forestière* (CFPF) *de Morondava*. The local climate is characterized by pronounced seasonality with a short rainy season from December to February followed by a dry season with little or no rain from April to November (Sorg & Rohner 1996). For a detailed description of forest structure and phenology, see Ganzhorn and Sorg (1996).

Observations in the wild: On 20 January 2004 at 2210h, I located a long-tailed *Microgale* individual. It sat horizontally on the base of a leave within a bush at a height of around 150 cm. The tail was not twisted around any vegetation. I approached the animal to within a few centimetres. It did not move and appeared to be in a torpid state. Air temperature at that time was 24°C (measured by a temperature logger I had in the forest for another research project). The temperature cited is from a control logger at the same height off the ground as the *Microgale*.

Observations in captivity: For 10 days (20 to 30 January 2004), I held the animal in captivity in a cage measuring 35 x 25 x 39 cm. The cage was provided with leaf litter (5 cm in depth) and some small branches to allow the animal to climb. The animal commenced its nightly activities between 1830h and 1900h and moved on the ground as well as on the branches. It was noted that after feeding the animal rested on a branch without moving, in a seemingly torpid or at least inactive state. During the day the animal slept in a nest of about 5 cm diameter within the leaf litter.

Plate 4: *Microgale* cf. *longicaudata* feeding on an insect of the family *Ensifera*. Note the hind feet stabilizing the animal on the branch while feeding.

I offered the *Microgale* different kinds of insects (Phasmidae, *Caelifera*, *Ensifera*; Coleoptera and larvae, Aranidae). Insects greater than about 6 cm were not eaten. When I offered several insects at the same time such as small *Ensifera* and beetle larvae, the latter were preferred. It did not consume some of the Coleoptera and one *Caelifera* species. In 5 out of 8 cases I observed the *Microgale* grasping the distal portion of its tail on a branch when feeding or chasing insects. It was my impression that this action was to avoid falling off the substrate especially when the insect prey was still active. In the other cases, the elongated hind feet stabilized the animal while feeding on branches (see Plate 4). Estimated body mass of the *Microgale* was less than 7g.

Conclusions: The observed individual of *M. cf. longicaudata* showed scansorial behaviour in the wild, and terrestrial and scansorial behaviour in captivity. While foraging, the long tail seemed to play a role in balancing and stabilizing the individual on substrate such as small branches. Food selection experiments indicated a preference for beetle larvae.

Given the difficulty of locating and capturing long-tailed shrew tenrecs in western Madagascar, to date only preliminary information about some aspects of their biology is available. Further studies in the wild as well as in captivity are needed to shed more light on the ecology and behaviour of these poorly known animals.

Acknowledgements

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Article:

Does the Cape sengi (*Elephantulus edwardii*) occur in Namibia?

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There are 15 species of sengi (elephant-shrews; order Macroscelidea) and all are found only in Africa (Rathbun 2004). Southern Africa has the greatest concentration of *Elephantulus* (Corbet and Hanks 1968), with five of the 10 species occurring in Namibia, Botswana, and South Africa (Skinner & Smithers 1990). The Cape Sengi (Plate 5) is thought to be the only species endemic to South Africa. It occurs in rocky habitats across the south-west from around Port Elizabeth on the south coast, north to Middelburg, west to Carnarvon, and then north-west to the Richtersveld National Park south of the Orange River, which forms the border with Namibia (Stuart & Stuart 1990). Mountainous rocky habitat occurs on both sides of the Orange River, mostly in South Africa's Richtersveld National Park and Namibia's Fish River Canyon National Park. It is not clear if large rivers, such as the Orange River, are barriers that can define the distribution of sengis. There are no records of *Elephantulus edwardii* north of the river, but this area is not biologically well known (Mike Griffin, personal communication) and it is possible that this sengi has escaped detection in Namibia. To determine if the Cape sengi occurs in Namibia, we live-trapped several sites on the north side of Orange River in July 2004 and qualitatively assessed habitats in the region.

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Plate 5. Cape sengi (*Elephantulus edwardii*) from Cederberg Mountains near Clanwilliam, South Africa. The dark tail is among the diagnostic traits for this species.

Methods

We used up to 54 Sherman live traps at each site, baited with a dry mixture of rolled oats, peanut butter, and Marmite. The traps were set in rough lines through rocky habitat at 10 to 20 metre intervals, where we believed sengis would occur. The traps were set in the afternoon, two or three hours before sunset, and then checked the next morning one or two hours after sunrise.

Results

Our results are summarized in the two tables below:

Table 1. Characteristics associated with our five trapping locations, which were on rocky ridges or kopjes. Site 3 was trapped on two consecutive nights.

Site No.	Date (2004)	Location with latitude/longitude	Elev-ation	Trap Nights
1	12 July	Kopje N of Cañon Lodge, Gondwana Park 27° 39.441' S, 17° 47.549' E.	780 m	30
2	13 July	Window ridge, NW of Cañon Lodge, Gondwana Park 27° 38.334' S, 17° 47.443' E	805 m	35
3	14 & 15 July	Ridge E. of Cañon Lodge, Gondwana Park 27° 38.428' S, 17° 48.602' E	850 m	45+45
4	25 July	*Ca.* Bosplass Camp, road C13, near Orange River 28° 09.862' S, 17° 12.855' E	240 m	54
5	26 July	*Ca.* 12 km. E., Bosplass Camp on Orange River 28° 14.654' S, 17° 16.260' E	95 m	35

Table 2. Number of individual small mammals trapped at each location (Table 1).

Species	Sites					Total
	1	2	3	4	5	
Elephantulus rupestris	0	0	1+0	0	0	1
Petromyscus sp.	5	7	3+5	5	4	29
Aethomys namaquensis	1	0	0+0	0	3	4
Aethomys chrysophylus	0	0	0+0	1	1	2
Petromus typicus	0	1	0+0	0	0	1
Total	6	8	4+5	6	8	37

Discussion

It is much easier to determine the presence of a small mammal than its absence. Therefore, our lack of success in trapping *E. edwardii* in Namibia is inconclusive. The western rock sengi (*E. rupestris*), which we trapped in Gondwana Park (Plate 6), is found widely in Namibia, mostly in mountainous and rocky habitats associated with the Western Escarpment. In South Africa, *E. edwardii* and *E. rupestris* are sympatric where their distributions meet, such as in the Goegap Nature Reserve near Springbok. In areas where the two species occur together, however, it is not known whether they are truly syntopic or there is some yet undefined partitioning of rocky habitats. Thus, just because we found *E. rupestris* at Gondwana Park does not necessarily preclude *E. edwardii* from occurring there in the same habitats.

We noted the very arid nature of the rocky habitats on both sides of the Orange River; there was very little vegetation of any kind growing among the rocks and

boulders. Although this may be the result of recent below-average rainfall years, that would not explain the absence of perennial and woody plants. This is in contrast to the rich flora found at locations in South Africa where we have trapped *E. edwardii* in the past, including the fynbos in the Cederberg Mountains near Clanwilliam and the Succulent Karoo at Goegap Nature Reserve near Springbok. We believe that *E. edwardii* is probably associated with more mesic rocky areas compared to *E. rupestris*, which is usually found in more arid and quite barren rocky areas, at least in Namibia.

Plate 6: A western rock sengi, *Elephantulus rupestris*, captured in the current study at Gondwana Park, Namibia.

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Plate 7: Map of mean annual rainfall in South Africa (South African Rain Atlas, 2004)

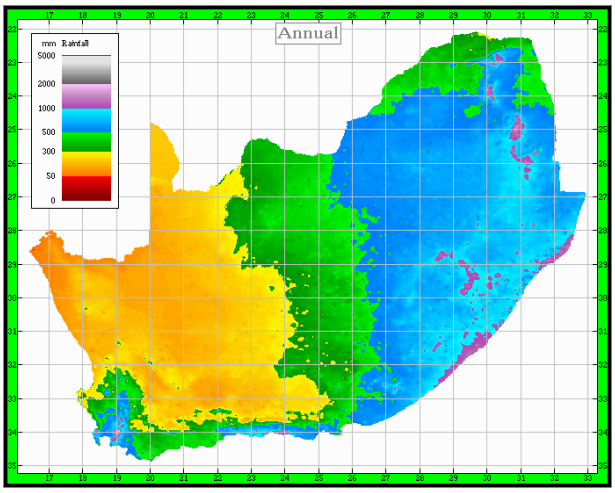
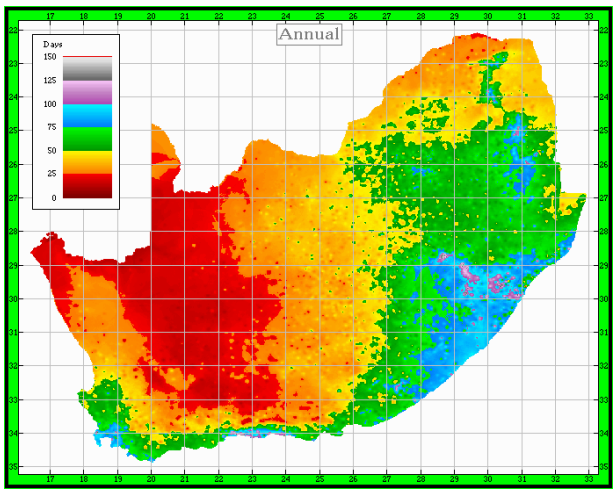


Plate 8: Map of mean annual rain days in South Africa (South African Rain Atlas, 2004).



The relatively moist or mesic habitats where the Cape Sengi is found are associated with the South Atlantic Anticyclone (winter rain) weather system that dominates the Cape Region of South Africa. In comparison, the Subtropical High Pressure Zone creates the more arid (and summer rain) conditions found in most of Namibia (Mendelsohn *et al.* 2002). The influence of the South Atlantic Anticyclone system wanes in the Orange River region, thus creating more arid habitats coincidentally with the Orange River (Plates 7 and 8).

We speculate, based on our trapping results and a qualitative assessment of habitats, that *E. edwardii* does not extend into Namibia. We suspect that it is restricted to South Africa because of the decline of mesic rocky habitats in southern Namibia in the vicinity of the Orange River. It is not likely that the Orange River acts as a physical barrier to their occurrence to the north.

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Afrotheria News

Black-and-rufous sengi (*Rhynchocyon petersi*) at the Philadelphia Zoo

The genus *Rhynchocyon* has rarely been held in zoo collections. Prior to 2000, the only individuals that were held for any extended period of time were two *R. chrysopygus* held at different times at the Frankfurt Zoo.

In November 2000, the Philadelphia Zoo acquired two pairs of black-and-rufous sengis (*R. petersi*) from a source within the US. The animals were reported to be captive-born and arrived already adapted to a diet of dried cat food. We have continued with this diet, with the addition of insects (mostly crickets and mealworms) and nutritional supplements. The following is a brief summary of our experience with these animals.

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Plate 9. Male and female black-and-rufous sengis with their twin offspring in Philadelphia Zoo.

Since the arrival of the two pairs, we have had 14 surviving offspring to four different pairings (two of the pairings included the same male). The Cincinnati Zoo, which received two pairs earlier in 2000, has also had successful reproduction and recorded the first documented captive breeding of this genus.

At the Philadelphia Zoo, litter size has been one or two. Twin as well as singleton litters have been reared successfully by the mother. Infants are born naked and with sealed eyes. They are deposited in a nest constructed by the adults, using available substrate (dried leaves, shredded paper, and/or wood mulch as provided). Mothers enter the nest for a single brief daily nursing bout and otherwise do not interact with the infant(s). Infants begin leaving the nest at 3-4 weeks of age. Fathers do not appear to be involved in infant care, with no interaction observed during the in-nest period and only casual interaction after the infants emerge from the nest. It is unclear whether male participation in nest construction constitutes parental investment, since adults also construct nests for sleeping. Interbirth interval following a successful litter is typically more than 80 days, but shorter (>40 days) if no infants survive from a litter.

Despite the number of surviving infants, survivorship as a proportion of total born has been low, although it has improved in the past year. Behavioural and perhaps nutritional issues are involved in infant losses. Successful rearing has occurred both with the male present and with the male separated, and both on and off exhibit. We have only very limited experience with a single two-female group, so can't yet determine relative reproductive success in such a group versus a pair. It does appear that unrelated females are relatively tolerant of each other, with or without a male present. It seems unlikely that multi-male groups would be reproductively successful. Although our experience in this area is limited as well, male-male tolerance (between non-relatives) appears to be lower than female-female tolerance.

Our breeding programme, in addition to adding to husbandry knowledge for this genus, has allowed us to collect substantial new information on reproduction, development, and social and other behaviour. We are also working to link our zoo programme with *in-situ* efforts, funding a survey of *R. petersi* in Kenya in 2004. Future plans include publishing more detail on the biology and husbandry of the species, expansion of the breeding programme to other institutions (we have already sent offspring to two other US facilities), and continued efforts to support field projects.

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An update on the annual dassie census in Matobo Hills, Zimbabwe.

Counts of two species of dassie or hyrax (*Heterohyrax brucei* and *Procavia capensis*) are conducted annually in Matobo Hills Zimbabwe (see the report by Chiweshe in *Afrotherian Conservation* Number 1). In 2003 (25 April - 26 May) and 2004 (23 April - 1 May) we surveyed the same 28 sampling sites (20 in the national park, 4 in commercial farmlands and 4 in communal lands) using the same methods as before. These were the twelfth and thirteenth censuses.

In 2003 the total number of dassies recorded was 1,363 animals (see Table 3 for details) - an increase of 7.5% from the previous year. This suggested that, in spite of the bad 2001/2002 rainy season and increased signs of poaching, there is a steady population recovery following the devastating disease outbreak in 1998. No sick-looking animals were noticed during this census period.

Table 3. Overall totals of dassies (*Heterohyrax brucei* and *Procavia capensis*) counted in the three land-use areas in the Matobo Hills in 2003 and 2004. Age categories - pup = < 3 months; juvenile (juv) = 1 year (born the previous year); sub-adult (sub-ad) = 2 years; adult (ad) = 3+ years. NP - national park; CFL - commercial farmland; CL - communal land.

2003

Land use	Species	Ad	Sub	Juv ad	Pup	Total
NP (20)	Hb	315	64	50	124	553
	Pc	287	83	50	95	515
CFL (4)	Hb	47	15	14	26	102
	Pc	35	11	5	15	66
CL (4)	Hb	29	2	6	8	45
	Pc	51	11	7	13	82
Overall	Hb	391	81	70	158	700
	Pc	373	105	62	123	663

2004

Land use	Species	Ad	Sub	Juv ad	Pup	Total
NP (20)	Hb	214	29	21	56	320
	Pc	187	31	4	59	281
CFL (4)	Hb	34	10	6	6	56
	Pc	29	9	5	13	56
CL (4)	Hb	17	2	2	3	24
	Pc	31	5	0	5	41
Overall	Hb	265	41	29	65	400
	Pc	147	45	9	77	378

However, in the 2004 census, the total number of animals counted was 778, a decrease of 42.9% (42.9% in *H. brucei*, 43.0% in *P. capensis*). A factor that might have affected this reduced count was the lack of foliage with good nutritional value in some areas of the park at the beginning of the animals' breeding period (August-September). This was caused by an extensive fire that burnt much of the park in August, compounded by very late rains to trigger fresh grass and leaves. Previous census results show that breeding success is usually higher following a good rainy season the year before.

Populations of both dassie species are denser in the park. Wider fluctuations in populations outside the park may be caused by competition for food with domestic livestock, and excessive and unchecked poaching activities. Natural predation is by snakes, raptors and carnivores. In the communal and resettled commercial farmlands, *Heterohyrax* appears to be more vulnerable to poaching than *Procavia*. This is probably due to its larger body size and its foraging behaviour; it is found in much lower kopje elevations making it more prone to snaring or capture by dogs. In turn, as in previous years, the colonies of *P. capensis* were located at higher kopje elevations in the communal areas compared to those in the protected national park and commercial farmlands.

Poaching activities continued both inside and outside the national park. A total of 68 snares was found in the study area and removed in 2003. In 2004, 23 wire and 4 fibre snares (set for both large mammals and dassies) were removed, in addition to seven rotten *Heterohyrax* carcasses in snares set in trees. In addition, curios made of dassie skins were seen being sold at almost all the gift shops within Matobo National Park, and at the nearby Bulawayo City Hall Mall.

The bad dassie breeding season in 2004 may be affecting their natural predators. Normally, egg-laying in Black Eagles starts from the end of April, beginning of May, yet none of the pairs within the Matobo Hills had started laying eggs by the end of the 2004 census.

I would like to thank the Warden of Matobo National Park who was very helpful, especially through the provision of a field assistant and accommodation. His senior staff also helped in many ways. My sincere thanks go to Viv Wilson and D.B. Hubbard for helping me get the project going by providing fuel. I am also very grateful to Evans Mabiza who was my assistant during both the 2003 and 2004 censuses.

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Afrotheria Noticeboard

The Species Survival Commission gets a new chair

Dr Holly Dublin has been appointed as the new chair to the IUCN Species Survival Commission. David Brackett completed his second term in the post at the World Conservation Congress and stood down under the rules of the IUCN statutes. During his Chairmanship, the SSC grew from a membership of 5,000 to nearly 8,000, with an ever-complex structure of more than 120 Specialist Groups, Task Forces, and Committees. David leaves a lasting legacy - a more focused, integrated and effective body of conservation experts, primed to take on the challenges facing conservation in the 21st century.

Holly Dublin's association with the SSC began over 30 years ago when she became a member of her first Specialist Group. Since that time she has contributed to numerous SSC Specialist Groups, task forces and initiatives. In 1992 she became the Chair of the African Elephant SG, one of the Commission's most productive and acclaimed groups. In 1994, Holly joined the SSC Executive Committee.

In 2002, Holly completed twenty years working for WWF. Since then, she has served as a Senior Conservation Adviser for IUCN's Eastern Africa Regional Office in Nairobi, while conducting independent evaluations and programmatic planning exercises for the Global Environment Facility, the International Finance Corporation, UNEP, WWF International and numerous other non-governmental organizations.

Dr Dublin's priorities for the SSC over the next four years include:

- restructure the Commission and its Secretariat support system to facilitate the integration of the work of SSC's members and Specialist Groups with the outputs of the SSC Strategic Plan (2001–2010) and IUCN's Key Results Areas (2005–2008)
- re-appoint the Specialist Group Chairs on the basis of criteria developed by the Consultative Group on Commissions, recommended to the IUCN Governance Task Force and later adopted by Council
- continue to respond in tangible ways to the recommendations outlined in the SSC's "2001 Study on Voluntarism" and the "2004 External Review of IUCN Commissions"
- assist in securing support for the implementation of the Species Information Service to enable it to reach its full potential
- forge stronger and more synergistic partnerships and joint programmes of work with our "sister" Commissions, the Secretariat and with relevant institutions and individuals outside IUCN
- investigate the merit and feasibility of SSC hosting an international forum on species conservation.

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Global Species Assessment online

The Global Species Assessment or GSA is the most comprehensive evaluation ever undertaken of the status of the world's biodiversity. It was released towards the end

of last year in conjunction with the 2004 IUCN Red List of Threatened Species.

The GSA shows trends in biodiversity over four years since the last major analysis in 2000, and it includes, for the first time, complete assessments of amphibians, cycads and conifers, as well as regional case studies. It also highlights which species are at greatest risk of extinction, where they occur, and the many threats facing them. Key findings of the GSA include:

- Numbers of threatened species are increasing across almost all the major taxonomic groups
- Most threatened birds, mammals, and amphibians are located on the tropical continents
- The world's list of extinctions increased - from 766 in 2000 to 784 documented extinctions since 1500 AD.
- Although estimates vary greatly, current extinction rates are at least one hundred to a thousand times higher than background or "natural" rates
- Humans have been the main cause of extinction and continue to be the principle threat to species at risk of extinction
- Habitat loss, introduced species, and over-exploitation are the main threats, with human-induced climate change becoming an increasingly significant problem.

The Global Species Assessment report is now available on the SSC website at:
http://www.iucn.org/themese/ssc/
or from the IUCN Bookstore at:
http://www.iucn.org/bookstore/

The GSA is produced by the Red List Consortium comprising IUCN and its Species Survival Commission, Conservation International and its Center for Applied Biodiversity Science, BirdLife International and NatureServe.

Change of site for tenrecs

The website run by David Kupitz entitled *Tenrec Resources and Information* has moved! It is no longer at www.tenrec.org but can now be found at:
http://tenrec.xardas.lima-city.de/

The new site includes a welcome line in Malagasy!

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Learn More About the IUCN/SSC Afrotheria Specialist Group

Have you checked out our website lately?

If not, go to: http://www.calacademy.org/research/bmammals/afrotheria/ASG.html

The home page appears as a map of Africa and Madagascar. By clicking on a photograph of a member of each of the five taxa covered by the group, the map displays the taxa's range. Pages available on the website are:

- What is Afrotheria? – explaining more about the Specialist Group
- Group Mission and Goals – what we are aiming to do
- Group Members – all the names and addresses
- Afrotherian Systematics - all you need to know about the taxonomic details of the group's target mammals
- Newsletter – the web-posted version of *Afrotherian Conservation*
- Photo Gallery - this page is under development but will have photos of species from all five taxa
- IUCN Specialist Groups – a link to the IUCN website and details of other specialist groups dealing with mammals.

The sengi site is especially worth a visit! Galen Rathbun, with the assistance of Charles Fox, the Webmaster at the California Academy of Sciences, has just updated the "Distribution" section of the sengi pages. with new maps These are a spin-off from our Global Mammal Assessment efforts and they are, according to Galen, "pretty much the best maps available for the Macroscelidea". Unlike many distribution maps, they are based on actual data points. The maps can be enlarged with your web browser so that more detail is visible!

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Guidelines for Authors

Articles, species profiles, news items and announcements are invited on topics relevant to the newsletter's focus. Manuscripts should be sent either by post or email to the Editor, Dr Peter J. Stephenson (c/o WWF International, Africa & Madagascar Programme, Avenue du Mont Blanc, CH-1196, Switzerland. Email PJStephenson@wwfint.org or afrotherianconservation@yahoo.co.uk). Articles should be under 3,000 words and follow the format of this edition. References should be cited in the text and listed in alphabetical order at the end of the article. Journal titles should be given in full. The Editor reserves the right to edit all contributions for style and content.

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