

Chapter 1 : elephant shrew - Wiktionary

The three mammalian orders, Insectivora, Scandentia, and Macroscelidea, all comprise small, terrestrial mammals that are primarily adapted to an insectivorous diet.

Elephant Shrew Family The 15 species of African elephant shrews have extraordinary trunklike noses. Although once assigned to the insectivores, elephant shrews are now classified in their own order. Elephant shrews, or sengis, are small African mammals. Despite their name, they are not shrews or members of the insectivores. Elephant shrews are known for having flexible snouts - evocative of a trunk - and long legs. They also have a unique form of tail line with thick bristles. No one is sure what the bristles are for, but they may be important for scent marking during fights and courtship. They eat termites sometimes burrowing into termite mounds, seeds, fruit and berries. The elephant shrews hop and jump from twig to branch on their powerful hind legs, using their tails as counterbalances. A litter of 1 or 2 well-developed young is born during the rainy season. The young can walk and jump almost as soon as they are born and appear to suckle for only a few days. There is a whole host of other animals that are intent on making them their next meal, from hawks and eagles to small cats, mongooses and a multitude of snakes. Rock elephant shrews are well aware of the danger that surrounds them, and they are always on the run from it. They carefully maintain tracks throughout their home ranges, linking feeding areas to bolt holes. These tracks are kept meticulously tidy, and for good reason. The elephant shrews sprint along them at breakneck speed, relying on being simply too fast for their predators to catch them. Elephant shrews get their name from their elongated, mobile snouts. They are also known as jumping shrews or sengis. Home ranges may be up to 1 sq km. This is a large area for an animal only 10 cm long to maintain, but, where food is scarce, it needs to search a large area to remain well fed. In places where food is much easier to come by, the home ranges tend to be considerably smaller. Young rock elephant shrews are born very well developed, and after just two days they are able to sprint nimbly around with their mothers. This one is found across Central and East Africa, where it lives in forest, on rocky ground and in other areas with plenty of thick cover. Four-toed elephant shrews forage on the ground. They maintain paths, or runways, through the undergrowth, which they scamper along on their long legs, holding their tail up as they run. The shrews use their long snouts to root around among vegetation and into tiny holes to find their prey, which is generally ants or termites. This species of elephant shrew gets its name from having just four toes on its hind foot. Elephant shrews do not have nests; instead they sleep outside in thickets. They form monogamous breeding pairs, which work together to maintain a territory. The pair may breed at all times of year. A single young is the norm, but twins are also seen. Female elephant shrews are pregnant for a long time, up to 65 days, for such a small animal. The young are highly precocious: Central and East Africa. Forests and rocky areas. Litters of 1 - 2 young born all year round. **Giant Elephant Shrew** The term "giant" is relative, given the size of this elephant shrew, although it is regarded as a distant relative of the elephant. Marking their territories is an important aspect of social communication in these elephant shrews. They have a special gland at the base of the tail for this purpose. Living in pairs or family groups, they are noisy by nature, squeaking regularly to stay in touch. At any sign of danger, an elephant shrew will slap down its tail, creating an instantly recognizable signal to other members of the group. They tend to be active during the day, rather than at night. Probably around 6 months. Mainly insectivorous, feeding on invertebrates such as ants and termites. Long, relatively slender and tapers along its length. **Nose** The sensitive, flexible, snout-like nose evolved for probing under fallen leaves and among vegetation. **Appearance** This shrew has a hunchbacked appearance in profile because of the length of the hind legs. **Colouration** Fur colour can range from beige to black, often with a mottled effect. **Nesting** Elephant shrews form a pile of leaves as their nest, collecting them in a hollow in the ground. **Gallery of Elephant Shrew.**

Chapter 2 : Giant golden mole videos, photos and facts - Chrysospalax trevelyani | Arkive

The three mammalian orders, Insectivora, Scandentia, and Macroscelidea, all comprise small, terrestrial mammals that are primarily adapted to an insectivorous diet. In general, we know very little about the threats facing the African Insectivora and elephant-shrews.

Characteristics[edit] Elephant shrews are small, quadrupedal, insectivorous mammals resembling rodents or opossums, with scaly tails, elongated snouts, and rather long legs for their size, which are used to move in a hopping fashion like rabbits. They vary in size from about 10 to 30 centimetres ³. Although the size of the trunk varies among species, all are able to twist it about in search of food. Their lifespans are about two and a half to four years in the wild. Several species make a series of cleared pathways through the undergrowth and spend their day patrolling them for insect life. If the animal is disturbed, the pathway provides an obstacle-free escape route. Elephant shrews are not highly social animals, but many live in monogamous pairs, which share and defend their home territory, marked using scent glands. Short-eared elephant shrews inhabit the dry steppes and stone deserts of southwestern Africa. They can even be found in the Namib Desert , one of the driest regions of the earth. Females drive away other females, while males try to ward off other males. Although they live in pairs, the partners do not care much for each other and their sole purpose of even associating with the opposite sex is for reproduction. Social behaviors are not very common and they even have separate nests. The one or two young are well developed at birth; they are able to run within a few hours. After mating, the pair will return to their solitary habits. After a gestation period varying from 45 to 60 days, the female will bear litters of one to three young several times a year. The young are born relatively well developed, but remain in the nest for several days before venturing outside. The young then slowly start to explore their environment and hunt for insects. After about 15 days, the young will begin the migratory phase of their lives, which lessens their dependency on their mother. An elephant shrew uses its nose to find prey and uses its tongue to flick small food into its mouth, much like an anteater. Eating large prey can pose a challenge; an elephant shrew struggling with an earthworm must first pin its prey to the ground with a forefoot. Then, turning its head to one side, it chews pieces off with its cheek teeth, much like a dog chewing a bone. This is a sloppy process, and many small pieces of worm drop to the ground; these are simply flicked up with the tongue. Some elephant shrews also feed on small amounts of plant matter, especially new leaves, seeds, and small fruits. They were separate from the similar-appearing order Leptictida. A considerable diversification of macroscelids occurred in the Paleogene Era. Some, such as *Myohyrax* , were so similar to hyraxes that they were initially included with that group, while others, such as *Mylomygale* , were relatively rodent -like. These unusual forms all died out by the Pleistocene. Classification[edit] In the past, elephant shrews have been classified with the shrews and hedgehogs as part of the Insectivora ; regarded as distant relatives of the ungulates ; grouped with the treeshrews ; and lumped in with the hares and rabbits in the Lagomorpha. Recent molecular evidence, however, strongly supports a superorder Afrotheria that unites elephant shrews with tenrecs and golden moles as well as certain mammals previously presumed to be ungulates, including hyraxes , sirenians , aardvarks and elephants. *Macroscelides proboscideus*, round-eared elephant shrew.

Chapter 3 : Biological Synopsis | Sengis (Elephant Shrews)

Elephant shrews, also called jumping shrews or sengis, are small insectivorous mammals native to Africa, belonging to the family Macroscelididae, in the order Macroscelidea. Their traditional common English name "elephant shrew" comes from a fancied resemblance between their long noses and the trunk of an elephant, and their superficial.

A cladistic look at classification within the subfamily Macroscelidinae based upon morphology. A revision of the elephant shrews, family Macroscelididae. The Sahara as a vicariant agent, and the role of Miocene climatic events, in the diversification of the mammalian order Macroscelidea elephant shrews. The rostral nasal anatomy of two elephant shrews. *Journal of Anatomy* The Biology of *Elephantulus brachyrhynchus*. Molecular evolution of mammalian aquaporin Further evidence that elephant shrew and aardvark join the paenungulate clade. *Molecular Biology and Evolution* Morphological variability and species limits in elephant shrews *Elephantulus intufi* and *E. Classification of Mammals Above the Species Level*. Columbia University Press, New York. The ecology and reproduction of the Short-snouted Elephant-Shrew, *Elephantulus brachyrhynchus*, in Zimbabwe with a review of the reproductive ecology of the genus *Elephantulus*. Johns Hopkins University Press, Baltimore. The fossil elephant-shrews Family Macroscelididae. *Bulletin of the Museum of Comparative Zoology, Harvard* Comparative aspects of the metabolism and thermal biology of elephant-shrews Macroscelidea. Allozyme and isozyme variation in seven southern African elephant-shrew species. Conservation issues and strategies for elephant-shrews. A bibliography of elephant-shrews or sengis Macroscelidea. *Mammal Review* Volume 32 1: Early Tertiary elephant-shrews from Egypt and the origin of the Macroscelidea. A new genus of Macroscelidea Mammalia from the Eocene of Algeria: A possible origin for elephant-shrews. *Journal of Vertebrate Paleontology* Biochemical systematics of elephant shrews from southern Africa. *Biochemical Systematics and Ecology* Comparative karyology of 3 species of elephant-shrew Insectivora, Macroscelididae. *Mammal Species of the World: A Taxonomic and Geographic Reference*. Smithsonian Institution Press, Washington D. An ultrastructural study of the spermatozoa of elephant shrews Mammalia, Macroscelidea and its phylogenetic implications. *Journal of Submicroscopic Cytology and Pathology* The penis of elephant shrews Mammalia, Macroscelididae. *Journal of Zoology* The male reproductive-system and the phylogeny of elephant-shrews Macroscelidea. Ultrastructure of spermatozoa of the yellow-rumped elephant shrew *Rhynchocyon chrysopygus* Mammalia, Macroscelidea and the phylogeny of elephant shrews. Information on the Internet Golden-rumped elephant-shrew *Rhynchocyon chrysopygus*. Check out the movies! University of Michigan Museum of Zoology.

African insectivora and elephant-shrews: an action plan for their conservation Complete Title: African insectivora and elephant-shrews: an action plan for their conservation.

Ancient Proboscideans Living elephants belong to two genera: They are thought to have shared a common ancestor with the extinct mammoths and all members of the Elephantidae. In Shoshani incorporated all extant and extinct Elephantidae, including stegodontidae and Primelephas, into the superfamily he called Elephantiformes. A female African Bush Elephant with her calf Middle: Range of the living African Elephant Above: Map showing the global distribution of Loxodonta remains. The family Gomphotheriidae, which includes the Cuvieronius and Gomphotherium, is closely related to the Elephantidae along with the family Mammutidae which includes the mastodons not to be confused with Mammuthus. However, in DNA sequence analysis was carried out resulting in the separation of the two subspecies because they are genetically diverse regardless of morphological similarity. They are larger in stature than the Elephas of Asia and fossils of this genus have only ever been found in Africa. It is therefore presumed that this genus is more primitive than the other extant genus residing in Asia. The two species of Loxodonta are: African Bush Elephant Loxodonta Africana The larger of the two African elephants, this species lives in sub-Saharan Africa however, its fossils have been found as far north as Libya. The Bush Elephant only has four toenails on its front feet and three on its back feet; this is different to both the Forest Elephant and Asian Elephant who both have five toenails on their front feet and four on the back feet. They are smaller than the Bush Elephant and it was originally thought there was a third species; the Pigmy Elephant living in the Congo basin. Genetic analysis has shown that these are just smaller versions of Forest Elephants, probably due to lower cover and different environmental conditions. The Forest Elephant has subtle differences in morphology to the Bush and Asian Elephants, for example they have a smoother forehead which is less convex and rounder ears. The Forest Elephant is not classified by the IUCN however its vulnerability status varies throughout its habitat due to habitat fragmentation. There are three subspecies denoting habitat area: The Asian Elephant is the largest land animal in Asia however, it is still smaller than the African Elephant. Their ears are smaller and flatten against the body; this could be due to differences in heat loss strategy and a decreased need to hear over long distances. Also, female Asian Elephants do not have tusks. The Asian Elephant is listed as endangered by the ICUN however, poaching still occurs and numbers are declining rapidly. Despite this downward trend, humans and elephants have a good working relationship with elephants being domesticated and trained to carry heavy items during construction; they are also large tourist attractions. It is quite ironic how elephants are being used by humans to pull down trees and transport their own natural habitat for human use. Perhaps this issue should be addressed by conservationists. Map showing the global distribution of Elephas remains. One documented incident recorded the killing of more than elephants in the Zakouma National Park, Chad in Another major issue with elephant conservation is the fact that the human population is expanding and settlements are moving into natural elephant habitat. The species seen to be most affected by this is the African Forest Elephant Loxodonta cyclotis. Its habitat has been severely fragmented over the past few years and population numbers are declining rapidly. Human safety has to be taken into consideration and many elephants are shot because they enter the settlement and raid houses for food. Elephant intelligence studies suggest that they do not forget favourite areas and if humans have settled in the elephant habitat then confrontation is likely to occur. Elephants have a large part in human history; they were traditionally tamed in Asia and used in large numbers to scare off the enemy during wars. Elephants are able to move over difficult terrain and are still used today to enter the most inaccessible parts of the jungle. Most recently, elephants were used by the BBC to carry cameras filming tigers in their natural habitat. Tiger "Spy in the Jungle. African Elephant Status Report Comptes Rendus de Biologie Statement on the Taxonomy of extant Loxodonta, Kalb, J. The American Philosophical Society. African Insectivora and elephant-shrews: The Forest and the Field in Ancient India. Permanent Black, Delhi Rohland, N. Mammal Species of the World: A Taxonomic and Geographic Reference 3rd ed. Johns Hopkins University Press. Molecular and morphological evidence on the

phylogeny of the Elephantidae.

Chapter 5 : Afrotheria - Wikipedia

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See Article History Alternative Titles: Macroscelidea, sengi Elephant shrew, order Macroscelidea , also called sengi, any of approximately 20 species of rat-sized African mammals named for their long, tapered, and flexible snout proboscis. All have slim bodies, slender limbs, and very long hind legs and feet. Although they resemble shrews , they are not insectivores but constitute the mammalian order Macroscelidea. Their ears and eyes are large, and, when alarmed, they run on their toes swiftly along paths they construct and maintain, sometimes leaping over obstacles. When foraging, they move along the pathways, using their paws and the constantly moving proboscis to turn over leaf litter and soil in search of prey, which consists of small insects especially ants and termites , other arthropods , and earthworms. Gestation lasts two months, and litters contain one or two well-developed young. Checkered elephant shrews *Rhynchocyon cirnei* weigh about half a kilogram 1. The fur is short, stiff, and glossy. Upperparts may be patterned with chestnut and buff; they may be orange on the forequarters, changing to dark red and then black on the rump, or uniformly dark amber with a shiny golden rump. The bicoloured tail is finely haired and appears bare. These elegant long-legged animals are similar in body form to small forest antelopes see dik-dik ; duiker. They live only in East Africa , where they inhabit tropical forests including deciduous lowland and montane forests with well-drained soils and carpets of leaf litter. Nests are made of dry leaves on the open forest floor. The largest species, the giant elephant shrew *R.* The smaller species weigh 30 to grams, with bodies 9 to 22 cm long and shorter tails of 8 to 18 cm. The soft, dense fur ranges from grayish brown to dark brown, in tones usually matching the soil where they live. They are found in the uplands of southern, eastern, and extreme northwestern Africa, inhabiting dry forests and scrub, savannas, open country covered by sparse shrubs or grass, semiarid and rocky habitats, and sandy, sparsely vegetated plains. They rest and den in burrows, rock crevices, depressions in the ground, and termite mounds, beneath fallen tree trunks, among tree roots, or in dense underbrush. In addition to the checkered elephant shrews, the family Macroscelididae also includes the long-eared elephant shrews genus *Elephantulus* , the round-eared sengis *Macroscelides proboscideus*, *M.* Macroscelididae is the only family in the order Macroscelidea. The evolutionary history of elephant shrews is confined to Africa and dates to the Late Eocene Their closest relatives were thought to be tree shrews and insectivores , but since the s elephant shrews have been recognized as a distinct order. They are possibly related to rabbits and rodents, although molecular data suggest that they may be more closely related to an ancient group that gave rise to the aardvarks , elephants, hyraxes , and sirenians. Learn More in these related Britannica articles:

Chapter 6 : Elephant Shrew Facts, History, Useful Information and Amazing Pictures

African insectivora and elephant-shrews: an action plan for their conservation / compiled by Martin E. Nicoll and Galen B. Rathbun, IUCN/SSC Insectivore, Tree-Shrew and Elephant-Shrew Specialist Group.

Golden-rumped sengi *Rhynchocyon chrysopygus* Few mammals have had a more colorful history of misunderstood ancestry than the elephant-shrews, or sengis. Most species were first described by Western scientists in the mid to late 19th century, when they were considered closely related to true shrews, hedgehogs, and moles in the order Insectivora. Since then, there has been an increasing realization that they are not closely related to any other group of living mammals, resulting in biologists mistakenly associating them with ungulates, primates, and rabbits. The recent use of molecular techniques to study evolutionary relationships, in addition to the more traditional morphological methods, has confirmed that elephant-shrews represent an ancient monophyletic African radiation. Most biologists currently include the elephant-shrews in a new supercohort, the Afrotheria, which encompasses several other distinctive African groups or clades. These include elephants, sea cows, and hyraxes the Paenungulata; the armadillo and elephant-shrews, and the golden-moles and tenrecs Hedges; Springer et al. Taxonomy Face-washing rufous sengi *Elephantulus rufescens* The 19 living species of sengis are well-defined, and their taxonomy is considered nearly definitive Corbet and Hanks; Rovero, Rathbun, et al. All living species are in a single family with two subfamilies. The giant elephant-shrews include the genus *Rhynchocyon* with four species, and the soft-furred elephant-shrews include three genera. *Petrodromus* is monospecific, *Macroscelides* has three species, and *Elephantulus* contains 11 species. Elephant-shrews were much more diverse during the Miocene period about 23 million years ago, when an additional four families existed Holroyd New fossil forms are also being described Grossman and Holroyd Some extinct forms had herbivorous-style teeth that were so similar to the dentition found in living hyraxes that they were first described as hyraxes Patterson, Butler The common name "sengi" is being used in place of elephant-shrew by many biologists to try and disassociate the *Macroscelidea* from the true shrews family *Soricidae* in the order *Eulipotyphla* Insectivora. Sengis are restricted to Africa, and are distributed throughout the continent with the exception of western Africa and the vast Sahara region Corbet and Hanks; Rathbun Southern and eastern Africa are centers of diversity. *Macroscelides* is only found in southwestern Africa, and the greatest number of *Elephantulus* species occur in southern Africa, followed by eastern Africa. *Rhynchocyon* only occurs in central and eastern Africa. *Petrodromus* is among the most widespread. *Elephantulus rozeti* is found only along the northwestern edge of the continent, separated from all other sengis by the Sahara. Morphology *Rhynchocyon* includes the largest and most colorful sengis see Photographic Gallery. The soft-furred species have similar body proportions, but range from about 25 g for *Macroscelides* to about g for *Petrodromus*. Species of *Elephantulus* are g. The smaller species are shades of brown and gray Corbet and Hanks Most sengi species are born precocial in small litters, although *Rhynchocyon* young are more altricial Rathbun, Neal The long limb bones are adapted for cursorial locomotion Evans Some features of sengi tails provide insights into their biology. The relatively long digestive tract includes a caecum Spinks and Perrin, Several features of the reproductive tract are distinctive, including the estrus cycle, polyovulation Horst, Tripp, abdominal testes, and the structure of the penis Woodall Physiology Scratching rufous sengi *Elephantulus rufescens* Sengi metabolic rates are typical of most mammals of similar size. However, several species are able to alter their physiology to meet environmental extremes Perrin a. For example, some species exhibit torpor when they encounter low temperatures Lovegrove et al. Their digestive physiology is similar to that of other insectivorous small mammals Woodall and Currie, despite their likely herbivorous ancestry. Ecology *Rhynchocyon* and *Petrodromus* are largely confined to lowland and montane forests and dense woodlands, while *Elephantulus* and *Macroscelides* are found in more arid lowlands, such as savannahs, scrublands, rocky outcrops, and deserts Rathbun In nearly all cases, sengis are found in low densities compared to many other small mammals FitzGibbon, Perrin b. At low latitudes reproduction is continuous, but at higher latitudes it is seasonal Neal All sengis prey on invertebrates, although most soft-furred species supplement this diet with small fruits, seeds, and green plant matter Rathbun

, Kerley Snakes, raptors, and carnivores are known predators of sengis. A wide variety of parasites are hosted by macroselids Fourie et al. Behavior Field studies of representatives of all four genera have been completed Sauer , Rathbun , FitzGibbon ; Schubert et al. Monogamous pairs defend congruent territories sex-specifically males vs. The giant sengis are strictly diurnal, while the soft-furred species are often crepuscular, with some activity during both day and night. Sengis have well-developed senses of sight, hearing, and smell. Most scent mark their territories with perianal, sternal, subcaudal, or foot glands. Although vocalizations are not common, many species frequently foot drum or tail slap the substrate in stressful situations. Rhynchocyon builds leaf nests on the forest floor, while most soft-furred species use burrows of other species, or construct their own. Some species maintain complicated trail systems through leaf-litter, and several have specialized sheltering habits, such as rock crevices in boulder fields, or relatively exposed spots on runs at the base of bushes. Husbandry Four-toed sengi *Petrodromus tetradactylus* In the past 20 years, with increasing knowledge of their natural history, several soft-furred sengis have been successfully kept and bred in captivity. These successes have resulted in increased research on captive animals Perrin b; Olbricht Although *Rhynchocyon* is difficult to maintain, it has recently been bred in captivity. Only *Petrodromus* has not reproduced in captivity Tripp , Nicoll and Rathbun , even though it is relatively easy to maintain. All four species of giant sengis, however, are at risk. The golden-rumped sengi *Rhynchocyon chrysopygus* is "endangered", the black-and rufous sengi *R.* In all cases the main threat is their restricted or fragmented forest habitats Nicoll and Rathbun that are being heavily impacted by logging practices and clearing for agricultural and urban development Rathbun and Kyalo Subsistence hunting for food may also be a problem in some areas. Summary A more detailed summary of the biology of extant sengis has been recently published Rathbun , and a review of fossil forms can be found in Holroyd Literature Cited The following citations represent some of the more important and significant contributions to the sengi literature, including reviews of topics. For additional citations search the Bibliography. Sengi elephant-shrew observations from northern coastal Kenya. *Journal of East African Natural History* A revision of the elephant-shrews, Family *Macroscelididae* [The Sahara as a vicariant agent, and the role of Miocene climatic events, in the diversification of the mammalian order *Macroscelidea* elephant shrews. A new species of round-eared sengi genus *Macroscelides* from Namibia. *Journal of Mammalogy* The osteology and relationships of the elephant-shrews *Macroscelididae*. *Bulletin of the American Museum of Natural History* Comparative ecology of two elephant-shrew species in a Kenyan coastal forest. *Arthropod parasites of elephant-shrews, with particular reference to ticks. Journal of Vertebrate Paleontology* Plate tectonics meets genomics. Some remarks on the biology of reproduction in the female of *Elephantulus*, the holy animal of set. *Transactions of the Royal Society of South Africa* The round-eared elephant-shrew *Macroscelides proboscideus* as an omnivore. Daily torpor in elephant shrews *Macroscelidae*: *Journal of Comparative Physiology Series B* The ecology and reproduction of the short-nosed elephant-shrew, *Elephantulus brachyrhynchus*, in Zimbabwe with a review of the reproductive ecology of the genus *Elephantulus*. Aspects of the reproductive biology of sengis *Macroscelidea* in general and the postnatal development of the short-eared sengi *Macroscelides proboscideus* in particular. University of Duisburg-Essen, Duisburg, Germany. Comparative aspects of the metabolism and thermal biology of elephant-shrews *Macroscelidea*. The fossil elephant-shrews Family *Macroscelididae*. *Bulletin of the Museum of Comparative Zoology, Harvard* *Zeitschrift fur Tierpsychologie Suppl.* Why is there discordant diversity in sengi *Mammalia: Macroscelidea* taxonomy and ecology? *African Journal of Ecology* Pp , in R. *Endangered animals -- conflicting issues.* Greenwood Press, Westport, Connecticut. A new species of giant sengi or elephant-shrew genus *Rhynchocyon* highlights the exceptional biodiversity of the Udzungwa Mountains of Tanzania. *Journal of Zoology* Zum sozialverhalten der kurzohrigen elefantenspitzmaus, *Macroscelides proboscideus*. *Zeitschrift fur Saugetierkunde* Male mate guarding in a socially monogamous mammal, the round-eared sengi: *Behavioural Ecology and Sociobiology* A new estimate of afrotherian phylogeny based on simultaneous analysis of genomic, morphological, and fossil evidence. *BMC Evolutionary Biology* 7: A new species of elephant-shrew *Afrotheria: Elephantulus* from South Africa. The digestive tract of *Macroscelides proboscideus* and the effects of diet quality on gut dimensions.

African Insectivora and Elephant-shrews, an Action Plan for their Conservation [20 MB PDF]. International Union for Conservation of Nature and Natural Resources (IUCN), Gland, Switzerland. International Union for Conservation of Nature and Natural Resources (IUCN), Gland, Switzerland.

See Article History Alternative Titles: Insectivora is obsolete as a taxonomic order, but the term insectivore is still used to refer to the remaining members, which have been classified into three orders: Soricomorpha, Erinaceomorpha, and Chrysochloridea. Together these three orders are called grandorder Lipotyphla by mammalogists, its members being referred to as either lipotyphlans or insectivores. Western European hedgehog *Erinaceus europaeus*. Natural history Insectivores make up almost 10 percent of all mammal species, and most are the size of mice or small rats. The white-toothed pygmy shrew *Suncus etruscus*, however, weighs less than 2. Other insectivores, such as the moonrat *Echinosorex gymnura* and the tailless tenrec *Tenrec ecaudatus*, attain the size of a small rabbit. Most insectivores are either ground dwellers or burrowers, but several are amphibious, and a few have adapted to life in the trees or forest understory. They prey almost entirely on invertebrates and small vertebrates. The olfactory lobes of the brain are highly developed, which indicates an acute sense of smell. The cerebral hemispheres, however, are small compared with those of most other placental mammals, which reflects less-developed intelligence and manipulative skills. Most have a long, flexible snout proboscis adorned with sensory whiskers vibrissae that is used to probe leaf litter, soil, mud, or water and locate prey by touch and smell. Prey may be pinned by the front feet, but it is typically grasped by the teeth and manipulated solely by mouth and proboscis until swallowed. Vision is poor; eyes are small, degenerate, or covered with skin in solenodons, shrews, moles, and golden moles. Although the eyes are larger in hedgehogs, the moonrat, gymnures, and tenrecs, they are still smaller than in other orders of living mammals. Insectivores vocalize by hisses and snarls or with a range of other sounds, including ultrasonics; some use specialized spines to produce sounds, and a few can echolocate. In he placed hedgehogs, shrews, and moles with opossums, armadillos, and pigs in the order Bestiae, as all have a long snout. In hedgehogs, shrews, and moles were separated from the others and joined with bears and other carnivores in the order Plantigrades, because all walk on the soles of their feet plantigrade. By the first few genera of tree shrews and elephant shrews had been described and included within Insectivora, and in the order was divided into suborder Menotyphla, containing tree shrews and elephant shrews, and suborder Lipotyphla for hedgehogs, shrews, moles, and their relatives. Revised classifications followed, but owing to the wide range of anatomical features present in the group, specialists could agree only that insectivores were placental mammals that could not be placed in any of the better-defined orders. Common Eurasian shrew *Sorex araneus*. Butler, who raised Lipotyphla to the rank of order now containing only hedgehogs, shrews, moles, solenodons, tenrecs, and golden moles, assigned elephant shrews and tree shrews to separate orders, and abandoned the name Insectivora. Most professional mammalogists now use Lipotyphla instead of Insectivora and informally refer to the group as either lipotyphlans or insectivores. Others, however, prefer Insectivora, and that name is still used in lay publications as well as some professional compilations. Defining the Lipotyphla has remained intractable, however, and the closest living relative of Lipotyphla has not been determined. Living lipotyphlans apparently share only two traits for certain. All lipotyphlans lack a cecum and have a short gut tube large and small intestine relative to body length without any expansion or shape change toward the end. In addition, the cartilaginous connection between the pubic bones of the pelvis is reduced. Most lipotyphlans also have a large extension of the maxillary bone that forms part of the eye socket. The most authoritative classification of mammals, presented by M. McKenna and Susan K. Bell in , placed Lipotyphla at a taxonomic rank higher than order grandorder and recognized three orders within the grandorder: Chrysochloridea golden moles, Erinaceomorpha hedgehogs, gymnures, the moonrat, and moles, and Soricomorpha solenodons, shrews, and tenrecs. The following arrangement basically follows the classification by McKenna and Bell, with a few alterations. Grandorder Lipotyphla insectivores or so species in 64 genera and 3 orders. Fossils of extinct genera and 13 extinct families have been identified. Order

Chrysochloridea Family Chrysochloridae golden moles 18 species in 7 genera from Africa. Tenrecs family Tenrecidae may actually be a member of this group. Order Erinaceomorpha 23 species in 1 family. Moles family Talpidae are sometimes classified in this group. Family Erinaceidae hedgehogs, gymnures, and the moonrat 23 species in 7 genera.

Chapter 8 : ADW: *Petrodromus tetradactylus*: INFORMATION

The evolutionary history of elephant shrews is confined to Africa and dates to the Late Eocene (to million years ago). Their closest relatives were thought to be tree shrews and insectivores, but since the s elephant shrews have been recognized as a distinct order.

Description[edit] Illustration of *Atelerix frontalis* Their bodies are covered by sharp spines. The average mass of a fully grown male is g. The main color is brown but there are other colors too. A Southern African hedgehog is covered with spines all over its body except for its face, belly and ears, and these spines are made of keratin protein with a hollow shaft and a muscle for each spine. They are dark brown and their spines are typically white at the base and dark brown at the tip. They have pointed snouts and typically have either a white or brown belly. When the hedgehog rests, it curls up into a ball. Night time is when the hedgehog forages for food, making it nocturnal. Mating season for the Southern African hedgehog is typically in the summer. With a gestation period of around 35 days, the babies are mainly born during the months of October through March. The size of the litters range from 1 to 11 babies with an average of four young. A newborn hedgehog typically weighs around 10g. The young are naked and blind when they are born and are born with infant spines, which are typically shed by the young when they are a month old. The amount of time it takes until a baby begins to forage with its mother is about 6 weeks and they will open their eyes about 2 weeks after birth. Hedgehogs can breed multiple times in one year and the baby hedgehogs reach sexual maturity 61â€”68 weeks of age. Males take no part in the raising of the young. However, the South African hedgehog has evolved to become mostly omnivorous due to habitat loss and trash from human civilization being readily available. The Southern African hedgehog is an omnivore and its diet typically consists of invertebrates, including beetles , grasshoppers , and slugs. They also eat small vertebrates including frogs and lizards. Since the hedgehog is known to frequent gardens, dog food has become another staple to their diet. Due to the fact that water is so scarce in the regions that the hedgehog lives, these hedgehogs are not reliant on free water and instead obtain most of their water through the food that they eat. Although these hedgehogs can be found in most environments, they prefer grass and Bushveld that is not too damp and with a good covering of leaves and other debris. They will spend most of the day underneath this cover of leaves or under bushes and in holes; only coming out at night to feed. Sleeping places are changed daily with only some wintering and breeding nests being semi-permanent. The resting places for hedgehogs changes almost daily. These hedgehogs typically live by themselves, except in the case of females rearing their young, for them, residency is more permanent for a period of time. Many of these hedgehogs live in suburban gardens in areas of southern Africa where they are beneficial to humans through eating some of the pests that can hurt crops in peoples gardens. Relevant discussion may be found on the talk page. Please do not remove this message until conditions to do so are met. May Learn how and when to remove this template message Additionally, another way to conserve hedgehogs is for conservation organizations to raise and breed them in captivity because they live up to 7 years old, 4 years longer than their lifespan of 3 years in the wild. In South Africa, it is illegal to keep indigenous hedgehogs without a permit.

Chapter 9 : Southern African hedgehog - Wikipedia

Eurasian insectivores and tree shrews: status survey and conservation action plan This Action Plan highlights the biological importance of these species, reviews current knowledge, and identifies those at risk and the causes, critical areas for conservation, and specific conservation projects.