

1: Handbook of the Mammals of the World - Volume 1 | Lynx Edicions

The present volume deals with the members of the Carnivora, with which most people are familiar, viz., the Cats, and I am again indebted to Mr. Lydekker for a most useful summary of our present knowledge of these animals, and also for his very interesting conclusion to the work, wherein he deals with the extinct members of the Order.

Taxonomy[edit] Carnivore wolf mandible diagram showing the names and positions of the teeth Carnivorans all share the same arrangement of teeth in which the last upper premolar named P4 and the first lower molar named m1 have blade-like enamel crowns that work together as carnassial teeth to shear meat. Carnivorans have had this arrangement for over 60 million years with many adaptations, and these dental adaptations help identify carnivoran species and groupings of species. Their molecular phylogeny [6] shows the extant Carnivora are a monophyletic group, the crown group of the Carnivoramorpha. This section needs additional citations for verification. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed. July Learn how and when to remove this template message A brown bear , showing the sharp teeth and claws characteristic of carnivorans Most carnivorans are terrestrial ; they usually have strong, sharp claws , typically with five, but never fewer than four, toes on each foot, and well-developed, prominent canine teeth , cheek teeth premolars , and molars that generally have cutting edges. These blade-like teeth occlude close with a scissor-like action for shearing and shredding meat. Carnassials are most highly developed in the Felidae and the least developed in the Ursidae. Carnivorans have six incisors and two conical canines in each jaw. The only two exceptions to this are the sea otter *Enhydra lutris* , which has four incisors in the lower jaw, and the sloth bear *Melursus ursinus* , which has four incisors in the upper jaw. The number of molars and premolars is variable between carnivoran species, but all teeth are deeply rooted and are diphyodont. Carnivorans have either four or five digits on each foot, with the first digit on the forepaws, also known as the dew claw , being vestigial in most species and absent in some. Most species are rather plain in coloration, lacking the flashy spotted or rosetted coats like many species of felids and viverrids have. This is because Canioidea tend to range in the temperate and subarctic biomes , although Mustelidae and Procyonidae have a few tropical species. Most are terrestrial, although a few species, like procyonids , are arboreal. All families except the Canidae and a few species of Mustelidae are plantigrade. Diet is varied and most tend to be omnivorous to some degree, and thus the carnassial teeth are less specialized. Canioidea have more premolars and molars in an elongated skull. The superfamily Felioidea or suborder Feliformia “ Felidae cats , Prionodontidae Asiatic linsangs , Herpestidae mongooses , Hyaenidae hyenas , Viverridae civets , and Eupleridae Malagasy carnivorans , as well as the extinct family Nimravidae paleofelids “ often have spotted, rosetted or striped coats, and tend to be more brilliantly colored than their Canioidean counterparts. This is because these species tend to range in tropical habitats, although a few species do inhabit temperate and subarctic habitats. Many are arboreal or semiarboreal, and the majority are digitigrade. Diet tends to be more strictly carnivorous, especially in the family Felidae. They have fewer teeth and shorter skulls, with much more specialized carnassials meant for shearing meat. Feliformia claws are often retractile, or rarely, semiretractile. The terminal phalanx, with the claw attached, folds back in the forefoot into a sheath by the outer side of the middle phalanx of the digit, and is retained in this position when at rest by a strong elastic ligament. In the hindfoot, the terminal joint or phalanx is retracted on to the top, and not the side of the middle phalanx. Deep flexor muscles straighten the terminal phalanges, so the claws protrude from their sheaths, and the soft "velvety" paw becomes suddenly converted into a formidable weapon. The habitual retraction of the claws preserves their points from wear. Being homeothermic warm-blooded marine mammals, pinnipeds need a low surface area to body mass ratio. The body is usually insulated with a thick layer of fat called blubber and typically covered with hair. The digits are not separate, but connected by a thick web that forms flippers for swimming; thus, the forelimbs and hindlimbs are transformed into paddles. They can remain underwater for long periods of time, sometimes an hour or more, but most dives are usually short. The facial region of skull is relatively small, with pinnae very small or lacking, and the vibrissae are well developed. The molariform teeth are mostly homodont and the canines are well developed. The tail is very short or absent, the ears are small or

absent as well, and the external genitalia are hidden in slits or depressions in the body. The skull has a highly developed zygomatic arch just behind the maxilla common to all mammals and their cynodont forebears, and they have ossified external auditory bullae. Felidae have a two-chambered auditory bulla. In addition to allowing extra room for the passage of muscles to work the lower jaw, the zygomatic arch also allows for differentiation of separate muscle groups to be involved in biting and chewing. Masseters attach from the dentary specifically, the masseteric fossa to the zygomatic arch and onto the maxilla in front of the arch, providing crushing force. The temporalis attaches from the dentary specifically, the coronoid process to the side of the braincase, providing torque about the axis of jaw articulation. Diagram of a wolf skull with key features labelled

In comparing the skulls of carnivores and herbivores, it can be seen that the shearing force of the temporalis is somewhat more important to carnivores, which have more room on the braincase this is not unrelated to carnivoran intelligence and commonly develop a sagittal crest running from posterior to anterior on the skull, providing yet additional room for temporalis attachment. Carnivoran jaws can only move on a vertical axis, in an up-and-down motion, and cannot move from side-to-side. The jaw joint in carnivores tends to lie within the plane of tooth occlusion, an arrangement that further emphasizes shearing as in a pair of scissors. In herbivores, the crushing force of the masseters is relatively more important than is shearing. The jaw joint is generally well above the plane of tooth occlusion, allowing extra room for masseteric attachment on the dentary and causing the rotation of the lower jaw to be translated into straight-ahead crushing force between the teeth of the upper and lower jaws. Dentition[edit] Dentition relates to the arrangement of teeth in the mouth, with the dental notation for the upper-jaw teeth using the upper-case letters I to denote incisors, C for canines, P for premolars, and M for molars, and the lower-case letters i, c, p and m to denote the mandible teeth. Teeth are numbered using one side of the mouth and from the front of the mouth to the back. In carnivores, the upper premolar P4 and the lower molar m1 form the carnassials that are used together in a scissor-like action to shear the muscle and tendon of prey. Carnivora have a simple stomach adapted to digest primarily meat, as compared to the elaborate digestive systems of herbivorous animals, which are necessary to break down tough, complex plant fibers. The caecum is either absent or short and simple, and the colon is not sacculated or much wider than the small intestine. Most species of Carnivora are, to some degree, omnivorous, except the Felidae and Pinnipedia, which are obligate carnivores. Most have highly developed senses, especially vision and hearing, and often a highly acute sense of smell in many species, such as in the Canidae. They are excellent runners: Even bears and raccoons, although seemingly slow and clumsy, are capable of remarkable bursts of speed. Diet specializations[edit] Carnivorans include carnivores, omnivores, and even a few primarily herbivorous species, such as the giant panda and the binturong. Important teeth for carnivorans are the large, slightly recurved canines, used to dispatch prey, and the carnassial complex, used to rend meat from bone and slice it into digestible pieces. Dogs have molar teeth behind the carnassials for crushing bones, but cats have only a greatly reduced, functionless molar behind the carnassial in the upper jaw. Cats will strip bones clean but will not crush them to get the marrow inside. Omnivores, such as bears and raccoons, have developed blunt, molar-like carnassials. Carnassials are a key adaptation for terrestrial vertebrate predation; all other placental orders are primarily herbivores, insectivores, or aquatic. The average gestation period lies between 50 and days, although the ursids and mustelids have delayed implantation, thus extending the gestation period six to 9 months beyond the normal period. Litter sizes are usually small, ranging from one to 13 young, which are born with underdeveloped eyes and ears. In most species, the mother has exclusive or at least primary care of the offspring. Many species of carnivorans are solitary, but a few are gregarious. The transition from Miacidae to Carnivora was a general trend in the middle and late Eocene, with taxa from both North America and Eurasia involved. The divergence of carnivorans from other miacids, as well as the divergence of the two clades within Carnivora, Caniformia and Feliformia, is now inferred to have happened in the middle Eocene, about 42 million years ago mya. Today, Carnivora is restricted to the crown group, Carnivora and miacoids are grouped in the clade Carnivoramorpha, and the miacoids are regarded as basal carnivoramorphs. Based on dental features and braincase sizes, it is now known that Carnivora must have evolved from a form even more primitive than Creodonta, and thus these two orders may not even be sister groups. Older classification schemes divided the order into two suborders: Fissipedia which included the

families of primarily land Carnivora and Pinnipedia which included the true seals , eared seals , and walrus. However, it is now recognized that the Fissipedia is a paraphyletic group and that the pinnipeds were not the sister group to the fissipeds but rather had arisen from among them. Carnivora are generally divided into the suborders Feliformia cat-like and Caniformia dog-like , the latter of which includes the pinnipeds. The pinnipeds are part of a clade, known as the Arctoidea , which also includes the Ursidae bears and the superfamily Musteloidea. The Musteloidea in turn consists of the Mustelidae mustelids: The oldest caniforms are the Miacis species *Miacis cognitus*, the Amphicyonidae bear-dogs such as *Daphoenus* , and *Hesperocyon* of the family Canidae, subfamily Hesperocyoninae. Hesperocyonine canids first appeared in North America, and the earliest species is currently dated at Miacis and Amphicyonidae were the first of the caniforms to split from the others and are sometimes considered to be sister groups to Ursidae, but the exact closeness of Amphicyonidae and Ursidae, as well as Arctoidea to Ursidae, is still uncertain. The Canidae wolves , coyotes , jackals , foxes and dogs are generally considered to be the sister group to Arctoidea. Like the canids, this family does not appear in Eurasia and Africa until the Miocene. *Nandinia* , the African palm civet, seems to be the most primitive of all the feliforms and the first to split from the others. The Nimravidae are sometimes seen as the most basal of all feliforms and the first to split from the others, but there is a possibility that Nimravidae might not even belong within the order, [14] and therefore its position as a clade within Carnivora is currently unstable. Other studies indicate that the barbourfelids form a separate family, which is closely related to the true felids instead of being related to the nimravids. Nimavid diversity appears to have peaked about 28 mya. The hypercarnivorous strictly meat-eating nimavid feliforms were extinct in North America after 26 mya and felids did not arrive in North America until the early middle Miocene 16 mya. It has been suggested that canids evolved hypercarnivorous morphologies because feliforms were absent during this period the " cat-gap ", Hypercarnivore feliforms felids and nimravids occupied an area that canids did not and where felids, nimravids, and hypercarnivorous creodonts are found. Hypercarnivorous canids were present before the disappearance of the nimravids, and all became extinct before the appearance of felids. Following the extinction of nimravids, only three taxa originated, two of which were relatively small in body size. Disparity increased during the "cat-gap" even with the extinction of the hypercarnivorous extremes. This was due to the extinction of morphological intermediates, and because carnivorans began to occupy hypocarnivorous nonmeat-specialist morphospace for the first time in North America. Procyonids did not arrive in North America until the early Miocene, and "modern" ursids e. Extinct lineages of Ursidae were present in North America from the late Eocene through the Miocene and amphicyonids bear-dogs were present during this period as well, but occupied a morphospace generally shared with canids and not in close proximity to ursids. During this period all hypercarnivorous forms disappeared from the fossil record, including hypercarnivorous feliforms, canids, and mustelids. One possible explanation is climate change. The same study also showed that the mustelids are not a primitive family, as was once thought. Their small body size is a secondary trait—the primitive body form of the arctoids was large, not small. They form a single sister taxon to the Herpestidae. The hyenas are also closely related to this clade.

2: A HAND-BOOK TO THE CARNIVORA. Part I [Only] Cats, Civets, and Mongooses. by Lydekker, Richard

A handbook to the carnivora: part 1: cats, civets, and mongooses [Richard Lydekker] on www.enganchecubano.com
FREE shipping on qualifying offers. This is a reproduction of a book published before

3: My New Book: The Carnivore Diet Handbook - Global Kristen Suzanne

A Hand-Book to the Carnivora Cats, Civets, and Mongooses by Richard Lydekker. Sketches of British Insects A Handbook for Beginners in the Study of Entomology by.

4: A Hand-Book to the Carnivora

A HANDBOOK TO THE CARNIVORA pdf

The Biodiversity Heritage Library works collaboratively to make biodiversity literature openly available to the world as part of a global biodiversity community.

5: Pardofelis - Wikipedia

The Carnivore Diet Handbook. I'm excited to announce that I wrote another new book, The Carnivore Diet Handbook. This is the book I wish I had when I started my carnivore diet.

6: A Hand-book to the carnivora. - CORE

Title. A hand-book to the Carnivora. Part 1, Cats, civets, and mongooses / Title Variants: Alternative: Cats, civets, and mongooses. Alternative: Handbook to the.

7: Details - A hand-book to the Carnivora. - Biodiversity Heritage Library

Notes. some of the plate are running into the gutter and scanned the original book.

8: Carnivora - Wikipedia

A Handbook to the Carnivora: Part 1: Cats, Civets, and Mongooses Average rating: 0 out of 5 stars, based on 0 reviews Write a review This button opens a dialog that displays additional images for this product with the option to zoom in or out.

9: Carnivore Ecology and Conservation: A Handbook of Techniques - Google Books

A Hand-Book to the Carnivora. London: Wh Allen. Allen's Naturalist Series Edition. Orig Cloth over Marbled Boards. Part 1 Cats, Civets and Mongooses. no date, circa pp, ill in color, many with tissue guards.

Traffic signs manual india Hematology : red and white blood cell tests The visible church : a critique and ongoing questions The new states of Asia Echoes from a Retirement Home Something Wicked This Way Comes Sound of Thunder (Library Edition) British Women Novelists 1750-1850 (British Novels in the 18th and 19th Century) Taming the Taildragger The Pen and Pencil Club Crosswords No. 1 (Pen Pencil Club Crosswords) Large scale machine learning with python Three kingdoms moss roberts Sourcebook on French law Chiari malformations New holland 660 baler manual V. 2. Virginibus puerisque. The amateur emigrant. The Pacific capitals. Silverado squatters. FDICs handling of small business asset foreclosures From Fieldhand To Ph. D, Ms. Asia International RECORDS OF THE ROYAL MARINES (Pro Readers Guide No 10) McCarthy on trademarks and unfair competition Nymphs of the Valley Understanding Citizenship 1 (Understanding Citizenship) Painting, staining, and finishing Data analysis for chemists Reflections from the Left Eye Cellulosics utilization Accounting standards A dictionary of synonyms and antonyms, with 5000 words most often mispronounced Black college students survival guide The Black Mustanger Biology in context for cambridge international a level The transcendental number Pi A survey of the social sciences More Sisters in Crime (Curley Large Print Books) Childrens book on american history The cardiovascular review book of practice exams for basic CV science and invasive CV technology Fundamentals of nursing 7th edition potter and perry The practice of statistics chapter 9 review Google s bulk as Analysis of the banking and currency system of the United States Court Rolls of Ramsey, Hepmangrove and Bury, 1268-1600/Book and Micro Fiche (Subsidia Mediaevalia)