

= Giant anteater =

The giant anteater ( *Myrmecophaga tridactyla* ), also known as the ant bear , is a large insectivorous mammal native to Central and South America . It is one of four living species of anteaters and is classified with sloths in the order Pilosa . This species is mostly terrestrial , in contrast to other living anteaters and sloths , which are arboreal or semiarboreal . The giant anteater is the largest of its family , 182 ? 217 cm ( 5 @. @ 97 ? 7 @. @ 12 ft ) in length , with weights of 33 ? 41 kg ( 73 ? 90 lb ) for males and 27 ? 39 kg ( 60 ? 86 lb ) for females . It is recognizable by its elongated snout , bushy tail , long fore claws , and distinctively colored pelage .

The giant anteater can be found in multiple habitats , including grassland and rainforest . It forages in open areas and rests in more forested habitats . It feeds primarily on ants and termites , using its fore claws to dig them up and its long , sticky tongue to collect them . Though giant anteaters live in overlapping home ranges , they are mostly solitary except during mother @-@ offspring relationships , aggressive interactions between males , and when mating . Mother anteaters carry their offspring on their backs until weaning them .

The giant anteater is listed as Vulnerable by the International Union for Conservation of Nature . It has been extirpated from many parts of its former range , including nearly all of Central America . Threats to its survival include habitat destruction , fire , and poaching for fur and bushmeat , although some anteaters inhabit protected areas . With its distinctive appearance and habits , the anteater has been featured in pre @-@ Columbian myths and folktales , as well as modern popular culture .

= = Taxonomy and phylogeny = =

The giant anteater got its binomial name from Carl Linnaeus in 1758 . Its generic name , *Myrmecophaga* , and specific name , *tridactyla* , are both Greek , meaning " anteater " and " three fingers " , respectively . *Myrmecophaga jubata* was used as a synonym . Three subspecies have been tentatively proposed : *M. t. tridactyla* ( ranging from Venezuela and the Guianas to northern Argentina ) , *M. t. centralis* ( native to Central America , northwestern Colombia , and northern Ecuador ) , and *M. t. artata* ( native to northeastern Colombia and northwestern Venezuela ) . The giant anteater is grouped with the semiarboreal northern and southern tamanduas in the family *Myrmecophagidae* . Together with the family *Cyclopedidae* , whose only extant member is the arboreal silky anteater , the two families comprise the suborder *Vermilingua* .

Anteaters and sloths belong to order Pilosa and share superorder Xenarthra with the Cingulata ( whose only extant members are armadillos ) . The two orders of Xenarthra split 66 million years ago ( Mya ) during the Late Cretaceous epoch . Anteaters and sloths diverged around 55 Mya , between the Paleocene and Eocene epochs . The *Cyclopes* lineage emerged around 30 Mya in the Oligocene epoch , while the *Myrmecophaga* and *Tamandua* lineages split 10 Mya in the Late Miocene subepoch . During most of the Cenozoic era , anteaters were confined to South America , which was formerly an island continent . Following the formation of the Isthmus of Panama about 3 Mya , anteaters of all three extant genera invaded Central America as part of the Great American Interchange .

The fossil record for anteaters is generally sparse . Some known fossils include the Pliocene genus *Palaeomyrmidon* , a close relative to the silky anteater , *Protamandua* , the sister taxon to the clade that includes the giant anteater and the tamanduas from the Miocene , and *Neotamandua* , a sister taxon to *Myrmecophaga* . *Protamandua* was larger than the silky anteater , but smaller than a tamandua , while *Neotamandua* was larger , falling somewhere between a tamandua and a giant anteater . *Protamandua* did not appear to have feet specialized for terrestrial or arboreal locomotion , but it may have had a prehensile tail . *Neotamandua* , though , is unlikely to have had a prehensile tail and its feet were intermediate in form between those of the tamanduas and the giant anteater . The species *Neotamandua borealis* was suggested to be an ancestor of the latter .

The giant anteater is the most terrestrial of the living anteater species . Its ancestors may originally have been adapted to arboreal life ; the transition to life on the ground could have been aided by the

expansion of open habitats such as savanna in South America and the availability there of colonial insects , such as termites , that provided a larger potential food source . Both the giant anteater and the southern tamandua are well represented in the fossil record of the late Pleistocene and early Holocene .

#### = = Description = =

The giant anteater can be identified by its large size , elongated muzzle , and long bushy tail . It has a total body length of 182 ? 217 cm ( 5 @. @ 97 ? 7 @. @ 12 ft ) . Males weigh 33 ? 41 kg ( 73 ? 90 lb ) and females weigh 27 ? 39 kg ( 60 ? 86 lb ) , making the giant anteater the largest extant species in its suborder . The head of the giant anteater , at 30 cm ( 12 in ) long , is particularly elongated , even when compared to other anteaters . Its tubular snout , which ends in its tiny mouth opening and nostrils , takes up most of its head . Its eyes and ears are relatively small . It has poor eyesight , but its sense of smell is 40 times more sensitive than that of humans . Giant anteaters can live around 16 years in captivity .

Even for an anteater , the neck is especially thick compared to the back of the head , and a small hump can be found at the back of the neck . The coat is mostly grey and salted with white . The forelimbs are white , with black bands around the wrists , while the hindlimbs are dark . Thick black bands with white outlines stretch from throat to shoulder , ending in triangular points . The body ends in a brown tail . The coat hairs are long , especially on the tail , which makes the tail look larger than it actually is . A stiff mane stretches along the back . The bold pattern was thought to be disruptive camouflage , but a 2009 study suggests it is warning coloration . While adult males are slightly larger and more muscular than females , with wider heads and necks , visual sex determination can be difficult . The penis and testes are located internally between the rectum and urinary bladder in males , and females have a single pair of mammary glands near the armpits .

The giant anteater has broad ribs . Despite its specific name , it has five toes on each foot . Four toes on the front feet have claws , which are particularly elongated on the second and third digits . It walks on its front knuckles , similar to the African apes , specifically gorillas and chimpanzees . Doing this allows the giant anteater to keep its claws out of the way while walking . The middle digits , which support most of its weight , are extended at the metacarpophalangeal joints and bent at the interphalangeal joints . Unlike the front feet , the hind feet have short claws on all five toes and walk plantigrade . As a " hook @-@ and @-@ pull " digger , the giant anteater 's enlarged supraspinous fossa gives the teres major more leverage ? increasing the front limbs ' pulling power ? and the triceps muscle helps power the flexion of the thickened third digit of the front feet .

The giant anteater has a low body temperature for a mammal , about 33 ° C ( 91 ° F ) , a few degrees lower than a typical mammalian temperature of 36 ? 38 ° C ( 97 @-@ 100 ° F ) . Xenarthrans in general tend to have lower metabolic rates than most other mammals , a trend thought to correlate with their dietary specializations and low mobility .

#### = = Feeding anatomy = =

The giant anteater has no teeth and is capable of very limited jaw movement . It relies on the rotation of the two halves of its lower jaw , held together by a ligament at the tip , to open and close its mouth . This is accomplished by its masticatory muscles , which are relatively underdeveloped . Jaw depression creates an oral opening large enough for the slender tongue to flick out . It is typically 60 cm ( 24 in ) long and is triangular posteriorly , rounded anteriorly , and ends in a small , rounded tip . The tongue is covered in backward @-@ curving papillae and coated in thick , sticky saliva secreted from its enlarged salivary glands , which allows the giant anteater to collect insects with it .

The tube @-@ like rostrum and small mouth opening restrict the tongue to protrusion @-@ retraction movements . During feeding , the tongue moves in and out around 160 times per minute ( nearly three times per second ) . According to biologist Virginia Naples , these movements are powered by the unique musculature of the giant anteater 's long , large , and flexible hyoid

apparatus . Conversely , biologist Karen Reiss states that the anteater 's tongue has no attachments to the hyoid and this is what allows it to flick its tongue at such speeds . The animal relies on the orientation of its head for aim . When fully extended , the tongue can reach 45 cm ( 18 in ) , longer than the length of the skull . The buccinators allow it to slide back in without losing attached food and tighten the mouth to prevent food from escaping as it extends . When retracted , the tongue is held in the oropharynx by the secondary palate , preventing it from blocking respiration . This retraction is aided by the long sternoglossus muscle , which is formed by the fusion of the sternohyoid and the hyoglossus , and does not attach to the hyoid . Thus , the tongue is directly anchored to the sternum .

Giant anteaters swallow at a much higher rate than most other mammals ; when feeding , they swallow almost continuously . Before being swallowed , insects are crushed against the palate . The giant anteater 's stomach , similar to a bird 's gizzard , has hardened folds and uses strong contractions to grind up the insects . The digestive process is assisted by small amounts of ingested sand and soil . The giant anteater cannot produce stomach acid of its own , but uses the formic acid of its prey for digestion .

#### = = Distribution and status = =

The giant anteater is native to Central and South America . Its known range stretches from Honduras to northern Argentina , and fossil remains have been found as far north as northwestern Sonora , Mexico . It is largely absent from the Andes and has been extirpated in Uruguay . It may also be extirpated in Belize , Costa Rica , and Guatemala . The species can be found in a number of habitats including both tropical rainforests and xeric shrublands , provided enough prey is present to sustain it .

The species is listed as Vulnerable by the IUCN , due to the number of regional extirpations , and under Appendix II by CITES , tightly restricting trade in specimens of the animal . Between 2000 and 2010 , the total population declined by 30 % . In 1994 , some 340 giant anteaters died due to wildfires at Emas National Park in Brazil . The animal is particularly vulnerable to fires due to its slow movement and flammable coat .

Human @-@ induced threats include collision with vehicles , attacks by dogs , and destruction of habitat . The giant anteater is commonly hunted in Bolivia , both for sport and sustenance . The animal 's thick , leathery hide is used to make equestrian equipment in the Chaco . In Venezuela , it is hunted for its claws . Giant anteaters are killed for safety reasons , due to their reputation as dangerous animals . The giant anteater remains widespread . Some populations are stable and the animal can be found in various protected areas in the Amazon and the Cerrado . It is officially protected in some Argentine provinces as a national heritage species .

#### = = Behavior and ecology = =

The giant anteater may use multiple habitats . A 2007 study of giant anteaters in the Brazilian Pantanal found the animals generally forage in open areas and rest in forested areas , possibly because forests are warmer than grasslands on cold days and cooler on hot days . Giant anteaters can be either diurnal or nocturnal . A 2006 study in the Pantanal found those anteaters to be mostly nocturnal : they are most active during nighttime and early morning , and retire as the temperature rises . On colder days , they start and end periods of activity earlier , shifting them into daylight hours , and may become diurnal . Diurnal giant anteaters have been observed at Serra da Canastra . Nocturnality in anteaters may be a response to human disturbances .

Giant anteaters typically rest in dense brush , but may use tall grass on cooler days . They carve a shallow cavity in the ground for resting . The animal sleeps curled up with its bushy tail folded over its body . The tail serves both to conserve body heat and as camouflage . One anteater was recorded sleeping with its tail stretched out on a sunny morning with an ambient temperature of 17 ° C ( 63 ° F ) ; possibly it was positioned this way to allow its body to absorb the sun 's rays for warmth .

Giant anteaters are good swimmers and are capable of moving through wide rivers . They have been observed to bathe . They are also able to climb and have been recorded ascending both termite mounds and trees while foraging . One individual was observed holding onto a branch with its feet just touching the ground .

== Spacing ==

Giant anteaters ' home ranges vary in size depending on the location . At Serra da Canastra National Park in Brazil , female anteaters have home ranges around 3 @. @ 67 km<sup>2</sup> ( 910 acres ) , while males live in home ranges of 2 @. @ 74 km<sup>2</sup> ( 680 acres ) . In other parts of Brazil , anteaters may have 9 km<sup>2</sup> ( 2 @, @ 200 acres ) ranges . Anteaters from Venezuela have been recorded living in home ranges as large as 25 km<sup>2</sup> ( 6 @, @ 200 acres ) . Individuals mostly live alone , except for females that nurse their young and males courting females . Anteaters communicate their presence , status , and sexual condition with secretions from their anal glands . They also advertise their presence to other individuals through tree markings and urine . They appear to be able to recognize each other 's saliva by scent .

Females appear to be more tolerant of females than males are of males , leading to greater overlap in female home ranges . Males are more likely to engage in agonistic behaviors , such as slowly circling each other , chasing , or actual fighting . Circling anteaters may cry a drawn @-@ out " harr " . In combat , they slash at each other with their claws and wrestle each other to the ground . Fighting anteaters may emit roars or bellows . Males are possibly territorial .

== Foraging and predation ==

This animal is an insectivore , feeding mostly on ants or termites . In areas that experience seasonal flooding , like the grassy plains of the Venezuelan llanos , anteaters mainly feed on ants , because termites are less available . Conversely , anteaters at Emas National Park eat mainly termites , which occur in high density on the grasslands . At Serra da Canastra , anteaters switch between eating mainly ants during the wet season ( October to March ) and termites during the dry season ( May to September ) .

Anteaters track prey by their scent . After finding a nest , the animal tears it open with its long fore claws and inserts its long , sticky tongue to collect its prey . An anteater spends one minute on average feeding at a nest , visiting up to 200 nests in one day and consuming as many as 30 @, @ 000 insects . The anteater may be driven away from a nest by the chemical or biting attacks of soldiers . Some termite species rely on their fortified mounds for protection and many individuals escape while the predator digs . These modes of defense prevent the entire colony from being eaten in one anteater attack .

Other prey include the larvae of beetles and western honey bees that have located their hives in termite mounds . Anteaters may target termite mounds with bee hives . In captivity , anteaters are fed mixtures made of milk , eggs , mealworms , and ground beef . To drink , an anteater may dig for water when no surface water is available , creating waterholes for other animals . Giant anteaters are prey for jaguars and pumas . They typically flee from danger by galloping , but if cornered , will rear up on their hind legs and slash at the attacker . The giant anteater 's front claws are formidable weapons , capable of killing a jaguar .

Although they are shy and typically attempt to avoid humans , giant anteaters can inflict severe wounds with their front claws and have been known to seriously injure or kill humans who corner and threaten them . Between 2010 and 2012 , two hunters were killed by giant anteaters in Brazil ; in both cases , the hunters were agitating and wounding cornered animals and the attacks appeared to be defensive behaviors . In April 2007 , an anteater at the Florencio Varela Zoo mauled a zookeeper with its front claws .

== Reproduction and parenting ==

Giant anteaters can mate throughout the year . During courtship , a male consorts with an estrous female , following and sniffing her . Male and female pairs are known to feed at the same insect nest . While mating , the female lies on her side as the male crouches over her . A couple may stay together for up to three days and mate several times during that period . Gestation lasts around 190 days and ends with the birth of a single pup , which typically weighs around 1 @. @ 4 kg ( 3 @. @ 1 lb ) . Females give birth standing upright .

Pups are born with eyes closed and begin to open them after six days . The mother carries its dependent pup on its back . The pup 's black and white band aligns with its mother 's , camouflaging it . The young communicate with their mothers with sharp whistles and use their tongues during nursing . After three months , the pup begins to eat solid food and is fully weaned by ten months . The mother grooms her offspring during rest periods lasting up to an hour . Grooming peaks during the first three months and declines as the young reaches nine months of age , ending by ten months . The decline mirrors that of the weakening bond between mother and offspring ; young anteaters usually become independent by nine or ten months . Anteaters are sexually mature in 2 @. @ 5 ? 4 years .

= = In culture = =

In the mythology and folklore of the indigenous peoples of the Amazon Basin , the giant anteater is depicted as a trickster foil to the jaguar , as well as a humorous figure due to its long snout . In one Shipib tale , an anteater challenged a jaguar to a breath @-@ holding contest under water , which the jaguar accepted . After the two removed their pelts and submerged , the anteater jumped out of the water and stole the jaguar 's pelt , leaving the jaguar with the anteater 's pelt . In a Yarabara myth , the evil ogre Ucara is transformed into one by the sun . This myth emphasizes the nearly immobile nature of the anteater 's mouth , which was considered a burden . The Kayapo people wear masks of various animals and spirits , including the anteater , during naming and initiation ceremonies . They believe women who touched anteater masks or men who stumbled while wearing them would die or receive some sort of physical disorder .

During the Spanish colonization of the Americas , the giant anteater was one of many native fauna taken to Europe for display . At first , Europeans believed all anteaters were female and mated with their noses , a misconception corrected by naturalist Félix de Azara . In the 20th century , Salvador Dalí wrote imaginatively that the giant anteater " reaches sizes bigger than the horse , possesses enormous ferocity , has exceptional muscle power , is a terrifying animal . " Dalí depicted an anteater in the style of *The Great Masturbator* . It was used as a bookplate for André Breton , who compared the temptations a man experiences in life to what " the tongue of the anteater must offer to the ant . "

The 1940 Max Fleischer cartoon *Ants in the Plants* features a colony of ants fighting off a villainous anteater . Released during the Phoney War , the film may have alluded to France 's Maginot Line .

An anteater is also a recurring character in the comic strip *B.C.* .. This character was the inspiration for Peter the Anteater , the University of California , Irvine team mascot .

The Flash cartoon *Happy Tree Friends* features an anteater named Sniffles .

In the Stephen King miniseries *Kingdom Hospital* , the character Antubis appears in the form of an anteater @-@ like creature with razor @-@ sharp teeth .