

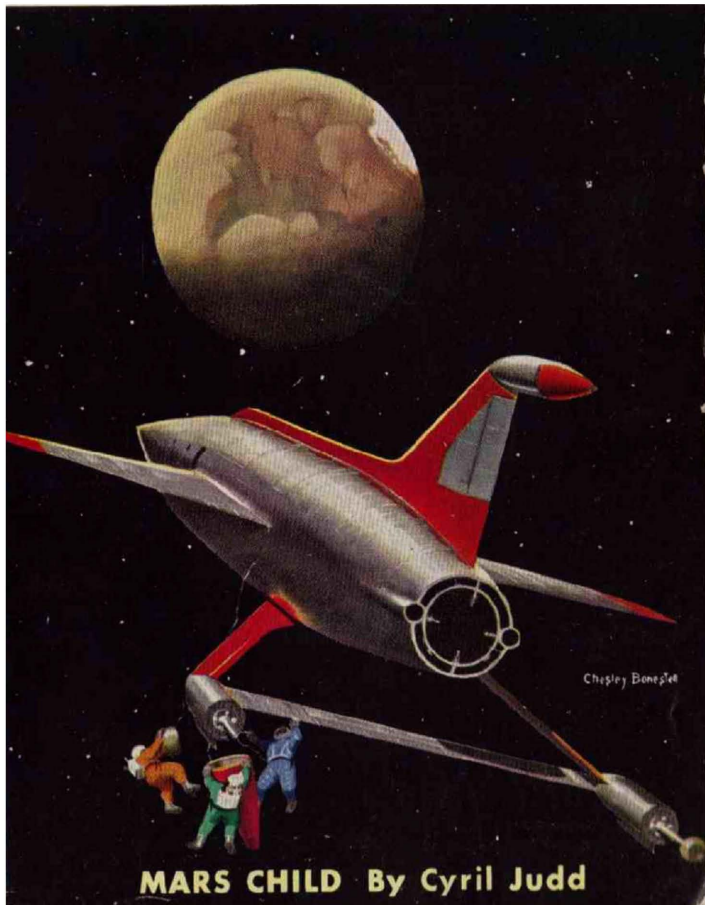
Galaxy

SCIENCE FICTION

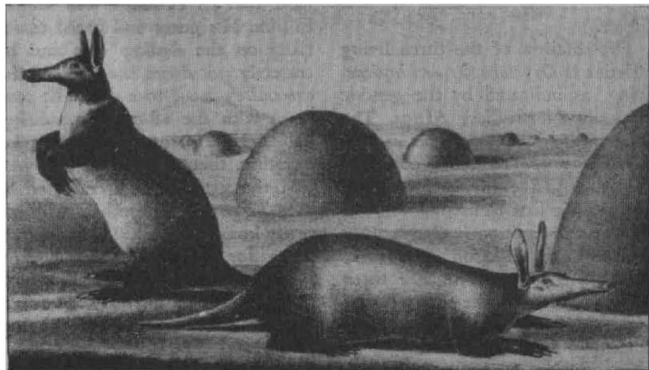
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MARS CHILD By Cyril Judd



Africa's Mysterious Mammal

By WILLY LEY

IT IS, of course, just the accident of Dutch spelling which puts the armadillo in the number one place in any Natural History index. But if strangeness were the deciding factor—strangeness of appearance, of habits or of position in the zoological system—the

armadillo would also land in the first place.

There are three living varieties of armadillos and their scientific designation is *Orycteropus*. The term is derived from a word in classical Greek which has the meaning of "digging tool," so that the name

There ought to be a law against such creatures as these; they violate practically all the principles of zoology!

may be simply translated as "the digger."

The smallest of the three living varieties is *Orycteropus aethiopicus*, living, as indicated by the generic name, in North East Africa. The Cape armadillo, *Orycteropus afer* or *Orycteropus capensis*, is considerably larger, five to six feet long, and was the first to become known. Most recent addition is *Orycteropus erikssonii*, or Eriksson's armadillo, which is the largest, of the three and lives in the dense forest of the Wele, Mubangi and Ituri regions of Central Africa.

Considering the location and nature of the last one's habitat, it is not surprising that it was discovered as recently as 1905. The other two just crept up on science, the year of discovery not being known.

This is strange in the case of the Ethiopian variety. Except for Egypt and the Mediterranean shore of the African continent, no other part of Africa was known for as long a time as Ethiopia. But even around the middle of the last century the Ethiopians themselves were mostly doubtful about the armadillo. An Austrian traveler, Theodor von Heuglin, was told by natives that in their country there was a flesh-eating beast, with the head of a crocodile, the ears of a donkey and the tail of a monkey.

Since von Heuglin guessed at once that it might be *Orycteropus* (he was not acquainted with the now common Dutch name) it is

clear that its existence was known to him. His guess was based essentially on the donkey ears and he correctly put down the item of the crocodile's head to a desire to conform with the alleged flesh-eating habits. He also noted, which is interesting, that the natives who just told the story about it referred to it as *Tirgbileh*. The others who actually knew the animal had another name for it; they called it *Abu Delaf*, "Father of Nails," which makes sense to anybody who has ever seen the armadillo's digging claws.

THE actual year of discovery of the Cape armadillo is not known either, but there is an early report about it which seems to be completely unknown to most zoologists. It can be found in a folio volume which was published in Germany in 1719. Its title reads, translated, *Description of the Cape of Good Hope*, and its author was a pastor, Peter Kolb. After his return to his native country he acquired the title of *Magister* and also became *Rector* of a school in a small town.

Magister Peter Kolb must have had voluminous notes and the book he wrote must have been rather tedious even for the literary tastes of his contemporaries. An anonymous Frenchman published a set of three volumes of excerpts, translated into French—and badly, if one is to trust the verdict of the

original publisher Peter Conrad Monath, who then proceeded to bring out a still heavy volume of excerpts in German, published in 1745.

Because Magister Kolb's report has never been republished or even quoted since its original appearance, it pays to do so now. It may be remarked first that the book is chiefly concerned with the natives of the area that is now the Union of South Africa. The zoological aspect creeps in via their domesticated animals, which leads to a chapter on "the ferocious and cruel animals" of the area. Finally Part III, Chapter 5 is devoted to such animals as are neither domesticated nor "cruel." It has several subdivisions, one of which is called "On the Pigs" and it says that there are four kinds of pigs in the area. Two of them have been introduced by Man, one from Java and one from Europe. The third kind is the "Spiny Pig" (the porcupine) and then:

The fourth kind is called the Earth Pig. It somewhat resembles the red pigs one meets in some places in Europe. But it has a longer skull and sharper snout, but no teeth [Kolb means tusks] and few bristles. The tail is long, the legs are long and strong. It lives in the ground where it makes a burrow with great speed. As soon as it has its head and fore limbs in the hole, it can hold on so fast

that even the strongest man cannot pull it out. Should it be hungry, it will look for an ant-hill. [Kolb means termite hill.] When it has found one, it looks around whether there is any danger . . . then it lies down and extends its tongue as far as it can. The ants crawl upon the tongue. When there are enough, the animal pulls the tongue in and swallows them. This it continues to do until it is fully sated . . . Its flesh has a delicious taste, almost like that of our wild hogs, and is very healthy. The Europeans and the Hottentots often hunt these animals. They are easy to kill by means of hitting them over the head with a stick.

THE term "earth pig" used by Kolb is, of course, a straight translation of the Dutch word *aardvark*, and the Dutch used that name because the hindlegs of the animal can be and are smoked like hams. (Mrs. Ley insists that that must be "the ham what ain't.")

Strangely enough Magister Kolb's simple account was not believed. When the French naturalist Count Buffon assembled the material for his great natural history work, he knew of Kolb's story, presumably via the French translation of excerpts, but decided that the animal was mythical.

This decision could hardly have been prompted by Kolb's account,

but Buffon may have heard from other sources that the animal was up to six feet long and lived in burrows in spite of its size. He may have been told that it has donkey's ears, independently movable, that it has long black hair, but so sparse that the skin can be seen through it. That it has a tail as heavy as a crocodile's tail, that it could dig so fast that even a strong man armed with a spade could not keep up with it, not counting the minor annoyance that the digging animal, keeping ahead of him, throws the soil it excavates frantically into the pursuer's face. Count Buffon may have been told that aardvarks, after feeding, "dance" in the moonlight. And that, when pursued above ground, they run half-erect on their hind legs for a short distance.

Except for this bipedal running, which is still somewhat in doubt, all these things were and are perfectly true, but Buffon may have found the composite picture entirely too much.

The volume in question had just been printed and bound when another German, a traveling surgeon by the name of Peter Simon Pallas, came to the aardvark's defense. Peter Simon Pallas had been elected to the Royal Society when only 23 years old, which commanded respect. The book in which he described the aardvark was written in Latin and was published in The Hague in 1766. Buffon, in later editions of his own work, accepted the

aardvark on Pallas authority—which must understandably have been a psychological strain—which had the result that later writers thought Pallas had furnished the first mention, or the first description, or even that he had discovered it personally.

Although all aardvarks are nocturnal, a specimen may be encountered in daylight on occasion. The English traveler Henry Drummond has left the following account of such a chance meeting:

. . . My dog did not pay any attention to my calls and I saw an animal which I could not recognize at once jump up in the high grass and run away. My dog chased it for several hundred paces and then stopped in front of one of the numerous holes . . . The tracks then told me that it had been an aardvark. I first tried to smoke it out of its apparently shallow burrow, but this attempt failed. Then I sent the Kaffir who was with me back for spades and while waiting I heard the aardvark dig continuously for two hours. When the men finally returned with tools I ordered them to dig, but after half an hour it became clear that we could not catch it that way. I changed my method, listened where the animal was and had a vertical hole dug about three feet in front of its position. After another hour we had come

so close that the aardvark stopped digging, retreated and came out of the burrow. I then killed it with a shot.

THE adult aardvark does not seem to have any other enemies than the natives, but the young are easy prey for pythons, which have the proper shape for entering the burrows. While aardvarks are not too difficult to keep in a zoological garden, they don't make much of an exhibit because they tend to sleep all day long—and, more exasperating, even, dig a hole for this purpose.

In nature the aardvark does not seem to exert much effort to find its own burrow when the sun rises; it is too easy to dig another one. Some observers have expressed the belief that each aardvark has a number of burrows, anyway. Others have thought that all the burrows may be common property.

Of the Cape aardvark it is believed that it gives birth to only one young. We are sure, however, about that fact as regards the Ethiopian variety because of Theodor von Heuglin's observations. He reported that the single young is born in May or June, that it is suckled for a long time and that it is most hairy, having *almost* a fur, when one year old. After that the hair is lost rapidly, so that the pinkish skin can be seen.

When von Heuglin was in Abyssinia, he kept one in captivity

for a long time, feeding it with milk, honey, dates and other fruit, in addition to the insects which it found itself. He wrote that it soon followed him around and amused all onlookers by its grotesque jumps. But, as usual, it slept most of the day. It always buried its droppings and von Heuglin noticed that the shallow hole dug for this purpose was dug with the hind feet and then covered up with the front feet. When it came to digging for a shelter, the fore feet did most of the work.

While this variety lives in the mountainous and dry country of Abyssinia, and the Cape variety in the open veldt of the South, Eriksson's aardvark has made the tropical humid heat of the Rain Forest its home. It is almost devoid of hairs and its skin is not pink like that of the others, but brick red, closely matching the red soil of Africa. It has shorter, more piglike ears, and, while more massive in general build, it has a much thinner tail than the two others. One, shot in the Ituri Forest by the British naturalist Cuthbert Christy in 1912, measured eight feet in length and Christy found tracks of an even larger specimen.

ALL this added up to a tight little group of very strange animals, but the real mystery was—which animal outside that group, living or extinct, had to be regarded as the nearest relative? Ob-

viously the aardvarks had to have relatives. But what were they? Fossils did not help much. The best known fossil type, excavated from the soil of the island of Samos, from the mainland of Greece and even from Persian soil, is called *Orycteropus gaudryi*. When, in 1888, it was described for the first time, the description stated that "except for its much smaller size, it differs little from the living Cape variety." Later work has shown that there are numerous minor differences, but it is still true that the Samos aardvark, if it were found alive, would simply be a fourth aardvark.

In 1918 W. D. Matthew made the original statement that the aardvarks may be very primitive ungulates, *i.e.* hoofed mammals. This idea is now generally accepted, and received much support some twenty years after it was first uttered because the San Juan Basin of New Mexico yielded the remains of a large mammal which was called *Ectoconus*. It was a very early mammal, belonging to the ancestral group of the hoofed mammals of our time. Although it had a lighter tail, and although its legs and feet were not adapted to

digging, it bore a strong resemblance in general appearance and in bodily proportions to the living aardvarks. In size it ranked with the Ituri forest giants.

PROF. MATTHEW did not claim that his *Ectoconus* was the ancestor of the African digger: "This general resemblance does not involve any near relationship, but indicates merely that the modern *Orycteropus* has retained with little alteration much of the proportions and structure that were common among primitive placentals of similar size."

And thus the animal doubted by Buffon and later shunted from place to place in zoology books turned out to be a somewhat modified image of a group of very early mammals, completely extinct otherwise. Their hoofed offspring has roamed all over Earth since then, excepting only Antarctica and the Australian region. But the leftover of the original type had to go underground to persist.

If I had merely read accounts of the animal without having seen specimens, I think I would not believe in aardvarks.

—WILLY LEY

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