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Article XXIII.— NOTES ON *SOLENODON PARADOXUS* BRANDT.

By J. A. Allen.

Plates XXVIII–XXXIII.

The Museum has recently secured three specimens of *Solenodon paradoxus* Brandt, collected in San Domingo in 1907, by A. Hyatt Verrill, for the Kny-Scheerer Company, dealers in natural history specimens, of New York City. They comprise a very old male and a very old female,[1] preserved in formalin, both with the teeth much worn, and the complete skeleton of a young specimen still retaining the entire milk dentition. The two adult animals have been utilized for a group, the specimens having been very carefully modeled by Mr. Herbert Lang. The skin of the female was removed for mounting, the skeleton and most of the soft parts being preserved separately. Of the male only the skin of the head could be used for mounting, owing to its bad state of preservation, although the specimen is available for anatomical study. Hence the male is shown as peering from a hole in the artificial rock-work that forms the setting for the group. An illustration of this group, from a photograph, was published in 'The American Museum Journal' for February, 1908 (Vol. VIII, No. 2), and is here reproduced in Plate XXVIII.

A figure of the female, from a wash-drawing, from life, was published by Mr. Verrill (*l. c.*), with an account of its capture, external characters, habits, distribution, native names, etc. The other two specimens were captured by Mr. Verrill after the above account was prepared. The first specimen was taken "near El Cajon, and the other two near La Honda," localities not given on ordinary maps, but situated in the eastern part of the Republic.

Mr. Verrill states that "the animal was well known to the natives in certain isolated localities, but that over the greater portion of the Republic it was absolutely unknown. This is readily accounted for by the presence of the mongoose in most parts of the country, and it is only a question of time when this pest will overrun the entire island and the Solenodon will become actually exterminated."

[1] This is the specimen figured and described by Mr. Verrill in his 'Notes on the Habits and External Characters of the Solenodon of San Domingo (*Solenodon paradoxus*),' published in the 'American Journal of Science' for July, 1907 (4th ser., Vol. XXIV, pp. 55–57, with a half-tone figure in the text), and also in the 'Annals and Magazine of Natural History' for the same month (7th ser., Vol. XX, pp. 68–70, pl. iv).

Great credit is due Mr. Verrill for persevering in his special quest for this animal until success rewarded his efforts, for its discovery seemed at the outset almost hopeless. Credit is also due to Dr. G. Lagai of the Natural Science Department of the Kny-Scheerer Company of New York, who for many years has taken great interest in securing specimens of Solenodon, and who engaged Mr. Verrill for this enterprise.

Mr. Verrill's account of the animal is the first that has appeared based on actual observation of the animal in life and in its natural surroundings. He says: "In its habits the Solenodon resembles a hog, rooting in the earth and cultivated grounds, tearing rotten logs and trees to pieces with its powerful front claws, and feeding on ants, grubs, insects, vegetables, reptiles, and fruit, and at times proving destructive to poultry. On several occasions it has been known to enter the houses in search of roaches and other vermin, and has been captured in rat-traps.

"It is strictly nocturnal, and spends the day in caves, holes in the coral limestone rocks and in hollow trees and logs. It is a slow, stupid creature. It is unable to run rapidly, but shambles along with the zigzag, sidewise motions of a plantigrade. It is doubtless owing to this that it obtained the native name of 'Orso' (bear).

"Its long snout and stout front feet, with their curved claws, and its thick, short neck, prove impediments to forward progress. According to the natives it is incapable of running straight. They also claim that when pursued it frequently trips itself and tumbles heels over head. When hunted with dogs it thrusts its head into the nearest hole or shelter and allows itself to be captured without resistance.

"The only specimen that I obtained was a female which was captured alive and uninjured. A few days after its capture it gave birth to three naked young. These the mother promptly devoured, and she died three days later."

Solenodon paradoxus was first made known to science by Brandt in a paper presented to the Academy of Sciences of St. Petersburg in December, 1832, and published the following year,[1] from a skin and imperfect skull received from Haiti. His description of the species is remarkably full and accurate, considering the nature of the material. This specimen remained unique until 1907, when the three specimens collected by Mr. Verrill (as noted above) were secured by this Museum. The single previously known specimen described by Brandt was restudied some thirty years later by Peters,[2] in comparison with his new species from Cuba (*Solenodon cubanus*),

[1] De Solenodonte, novo mammalium insectivorum genere. By J. F. Brandt. Mém. de l'Acad. de St. Pétersbourg, II, 1833, pp. 459–478. Also separate, pp. 1–20, pll. i, ii.

[2] Uber die Säugethiergattung *Solenodon*. By W. Peters. Abhandl. der Königl. Akad. der Wissenschaften zu Berlin, 1863 (1864), pp. 1–22, pll. i–iii.

the original type of *S. paradoxus* having been loaned to him by the authorities of the St. Petersburg Academy for this purpose. All subsequent accounts of this species, down to 1907, have also been based on this unique original, including the discussion of the phylogeny and dentition of *Solenodon* by Leche in 1907,[1] to whom the skull was again entrusted by the authorities of the St. Petersburg Academy for investigation (Leche, *l. c.*, p. 4).

As is well known, the genus *Solenodon* is an isolated type, represented, so far as known, by two species, one of which (*S. paradoxus*) is confined to Haiti, the other (*S. cubanus*) to Cuba. It is the sole genus of the family Solenodontidæ, which finds its nearest living representatives in the family Centetidæ, confined to Madagascar and some of its outlying islands, thus an equally isolated group. Both are commonly regarded as survivals of primitive types, whose ancestral history remains to be discovered.

The characters of *Solenodon* have become well known, especially through

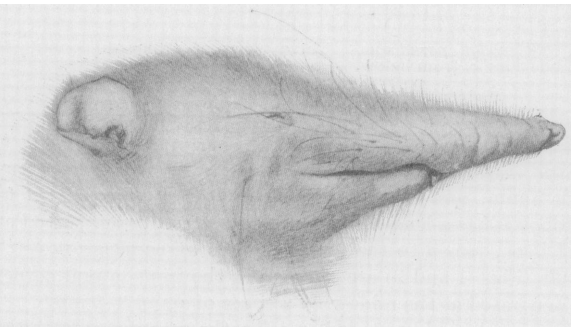

Fig. 1. *Solenodon paradoxus.* Side view of head of old male. Slightly less than ½ nat. size.

the labors of Dobson,[2] who has described not only the osteology and dentition, but the myology and visceral anatomy, based on *S. cubanus*; while its phylogeny and dentition have been especially considered by Leche,[3] who has also described and figured the milk dentition of *S. cubanus*.

In external characters *S. paradoxus* and *S. cubanus* are in general quite similar, but they differ somewhat in size, and markedly in coloration, and also in some other features, as will be presently noted.

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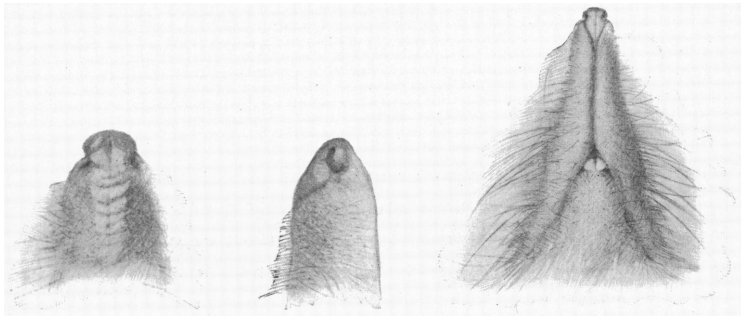
[1] Zur Entwichlungsgeschichte des Zahnsystems der Säugetiere zugleich ein Beitrag zur Stammesgeschichte dieser Tiergruppe. Von Wilhelm Leche. Zweiter Teil: Phylogenie. Zweites Heft: Die Familien der Centetidæ, Solenodontidæ und Chrysochloridæ. Mit 4 Tafeln und 108 Textfiguren. Zoologica, Heft 49. Stuttgard, 1907.

[2] A Monograph of the Insectivora, Systematic and Anatomical. By G. E. Dobson. Part I. Including the families Erinaceidæ, Centetidæ, and Solenodontidæ. 1882. (Solenodontidæ, pp. 87–96, pll. viii, ix.)

[3] *Op. cit.*, pp. 5–24 (*passim*), 55, 56, 144–146, pl. iv, figs. 55–58.

S. paradoxus may be described as follows:

The *nose* (from eye to tip of nose) is naked on the dorso-median area, and entirely so on the distal third, the short hairs of the facial region advancing laterally on the sides more than on the top; fore and hind feet naked, the bareness extending up-



a *b* *c*

Fig. 2. *Solenodon paradoxus*, Three views of proboscis, ½ nat. size. *a*, from above; *b*, from side; *c*, from below.

ward on the thighs to become confluent with the bare glandular area of the rump and lower back; tail naked.

The *nose-pad* (Figs. 1 and 2) is about 8 mm. wide at the extremity, produced dorsally about 5 mm., and extending ventrally in a V-shaped point for about 10–12 mm. The proboscis has a length of about 40 mm., and is supported at the base by a small plate of bone, joined to the premaxillaries by cartilage.

The *nostrils* (Figs. 1 and 2) are situated at the front lateral corners of the nose-pad, and are separated at the middle by a space of about 4–5 mm.

The *ear* is oval, obtusely rounded apically, the greatest width about equal to the length of the ear above the crown (Fig. 1).

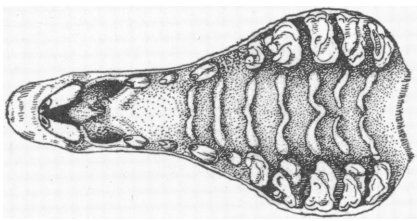


Fig. 3. *Solenodon paradoxus*. Palatal surface, showing number and character of the ridges. Nat. size.

The *tail* is naked, very finely and regularly annulated with small flat tubercles, from ½ to 1 mm. in transverse diameter; annulations about 1 to the millimeter on the basal half of the tail, becoming narrower apically, where there are 2 or 3 annulations to the millimeter.

The pelage is short, thin, and sparse, in comparison with that of *S. cubanus*, with much less underfur; the feet are less clothed, as is the face, and the naked, glandular area on the thighs and rump is more extended.

In *coloration* the female (in these two specimens) is brighter than the male. The general color of the median dorsal area is dusky brown, becoming lighter in front of the eyes, and laterally along the sides of the body and lower back; the hairs are lighter basally, and have lighter tips near the lateral and posterior borders of

the dark dorsal area; sides light, tinged with fulvous, deepening to rufous on the shoulders, and to chestnut on the sides of the neck and sides of the head; throat and pectoral region darker, blackish chestnut; ventral surface pale rufous; a small oval white spot on the nape, about 8 × 15 mm. in extent.

The pelage of the male is, unfortunately, in bad condition, the hair having become in large part detached. The white nape spot present in the female (probably an individual variation) is apparently absent. The pattern of coloration is in other

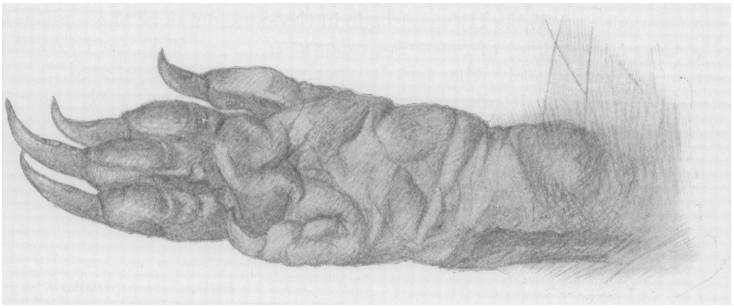


Fig. 4. *Solenodon paradoxus.* Left fore foot, from below, nat. size.

respects similar, but the tints are paler, the rufous especially much weaker in tone.

The interdental *palatal ridges* (Fig. 3) are apparently less strongly developed than in *S. cubanus*; as figured by Peters (*l. c.*, pl. ii, fig. 7), and cease about opposite p^1, instead of being continued forward to the base of the middle incisors, there being only 7 in *paradoxus* instead of 9 as in *cubanus*. In this respect the present specimens agree well with Brandt's figure (*l. c.*, pl. ii, fig. 5) of the type of *paradoxus*.

Mr. Verrill's description of the external characters, from the living animal, is

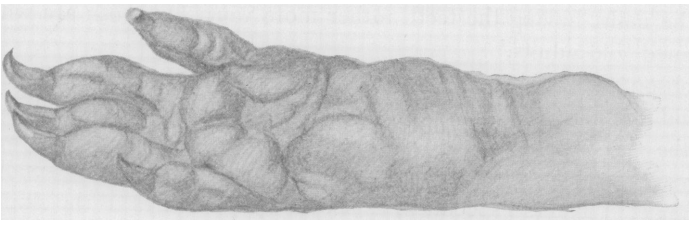


Fig. 5. *Solenodon paradoxus.* Left hind foot from below, nat. size.

of interest in the present connection, especially his references to the sparseness of the pelage, and the color of the naked parts of the animal, which is as follows:

"The body and head are covered with sparse, coarse hair, which is reddish ferruginous from the eyes to the shoulders, and dusky brown on the rest of the body.

"The hair becomes very thin and scattered on the hind quarters, which for some distance on the back and sides are naked, roughly corrugated, and warty, with a sparse, short, wooly growth between the excrescences.

"The legs, snout, and eyelids are naked and with the bare skin of the rump are pinkish white. The ears are short, thin, rounded, and are bluish gray with light edges. The heavy, rat-like tail is dark brown and naked. The claws are horn color. The front feet and claws are large, heavy, and mole-like and well adapted to digging and tearing asunder rotten wood, etc. They are much smaller in proportion than in the Cuban species, however. The snout is also more flexible than in *S. cubanus*, from which it also differs in the smaller extent of the naked skin of the rump, the color, size, and other characters."

I am indebted to Mr. Herbert Lang for the subjoined external measurements. Those of the male (see Table II) were made in the same detail as those given by Dr. Peters of the type (female) of *Solenodon cubanus* (*l. c.* pp. 5, 6), for convenience of comparison. Unfortunately the female specimen was dismembered before the importance of securing detailed measurements for comparison with those of the type of *S. cubanus* was recognized.

I. External Measurements of *Solenodon paradoxus*.

	♂ mm. No. 28270	♀ mm. No. 28271	mm. Type[1]
Total length in straight line	535	510	520
" " along curvature of body	586	555	—
Length of tail	241	220	230
" from calcaneum to tip of middle claw	71	69	—
" " olecranon to " " " "	104	104	—
" of the muzzle in front of the incisors	39	40	—

The above measurements show that in these two specimens the male considerably exceeds the female in size. The female is somewhat older than the male, having the teeth rather more worn, but both are what may be termed 'old adults.'

Dobson states that an adult male *Solenodon cubanus* in the Paris Museum, and another male in the Hunterian Museum are both somewhat smaller than the type of the species, a female, as described by Peters, "whence," he says, "we may, perhaps, infer that the male is somewhat smaller than the female." Peters's specimen, as shown by his figures of the skull, was a middle-aged animal, with the teeth wholly unworn; compared with a female skull in the U. S. National Museum Collection (No. 37983), of apparently about the same age, it is decidedly larger (see measurements of skulls in Table II), and also larger than a second skull in the U. S. National Museum Collection (No. $\frac{2230}{1398}$), also a female (see Table II); from this we may, perhaps, infer that Peters's specimen was an exceptionally large female, and

[1] From Brandt, *l. c.*

that the males mentioned by Dobson had not attained full size, although "apparently quite full grown." The figure given by Dobson of the Hunterian

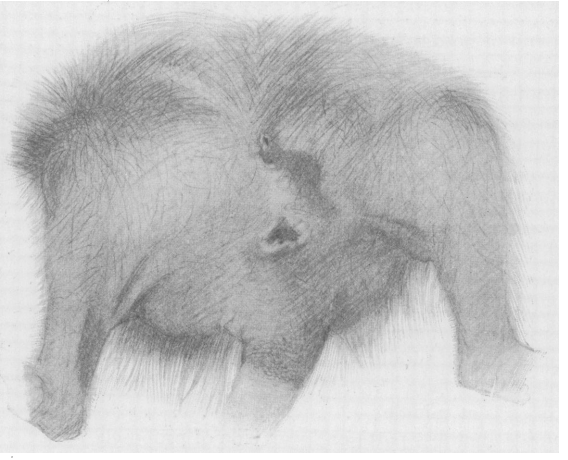


Fig. 6. *Solenodon paradoxus.* Male genitalia. ½ nat. size.

Fig. 7. *Solenodon paradoxus.* Female genitalia. ½ nat. size.

specimen shows it to have been moderately young; in the old age stage it would certainly have been notably large.

II. Comparative External Measurements of *Solenodon paradoxus* (♂) and *S. cubanus* (♀).

	paradoxus ♂[1]	*cubanus* ♀[2]
	mm.	mm.
Length from end of nose to base of tail (in curved line over the back	343	340
Length from end of nose to anus (in straight line)	282	280
Length of head (in straight line)	119	117
Breadth of head in front of ears	45	50
Distance from eyes to point of nose	72	67
Length of eyelids (fissure)	4	3
Distance of eyes from each other	30	29
Distance from eye to ear	30	28
Distance between ears at base	44	42
Height of ear	28	30
Breadth of ear	26	25
Length of proboscis to incisors	39	35
Breadth of proboscis at base	22	18
Breadth of proboscis at middle	14	10
Height of proboscis at base	19	16
Height of proboscis at middle	12	10.5
Length of muzzle (hairless part) on lower side of proboscis	12	10
Distance from point of under lip to corner of mouth	28	31
Distance between corners of mouth	30	30
Length of tail	241	190
Thickness of tail at middle	12.5	11
Length of *hand* to end of third digit (without claws)	41	43
" " 1st digit (without claw)	8	8.5
" " claw of 1st digit (over curvature)	9	9.5
" " 2d digit (without claw)	14	16
" " claw of 2d digit (over curvature)	16	29
" " 3d digit (without claw)	17	17.5
" " claw of 3d digit (over curvature)	17	26
" " 4th digit (without claw)	15	17
" " claw of 4th digit (over curvature)	12	28
" " 5th digit (without claw)	11	12
" " claw of 5th digit (over curvature)	9	16
" " *foot* to end of middle digit (without claw)	62	56
" " 1st digit (without claw)	8	10
" " claw of 1st digit (over curvature)	7	8
" " 2d digit (without claw)	11	15
" " claw of 2d digit (over curvature)	9	9.5
" " 3d digit (without claw)	12	15
" " claw of 3d digit (over curvature)	10	9.5
" " 4th digit (without claw)	11	15
" " claw of 4th digit (over curvature)	9	9
" " 5th digit (without claw)	10	14
" " claw of 5th digit (over curvature)	8	8.5

[1] No. 28270, Amer. Mus., ♂, *Solenodon paradoxus*. Measurements taken by Herbert Lang from specimen preserved in formalin.

[2] Type of *Solenodon cubanus* Peters. Measurements from Peters, *l. c.*, pp. 5, 6.

In external characters *S. paradoxus* and *S. cubanus* present a number of noteworthy differences, as in the relative length of the tail, the relative development of the fore claws, in coloration, and in the character of the pelage, as follows: *S. paradoxus* is slightly the larger (much larger if the comparison is based on the skulls); the tail is relatively about one fourth longer (see Table III), and the fore claws nearly one half shorter and correspondingly weaker.

In coloration *S. paradoxus* has the dorsal area lighter than *S. cubanus*,

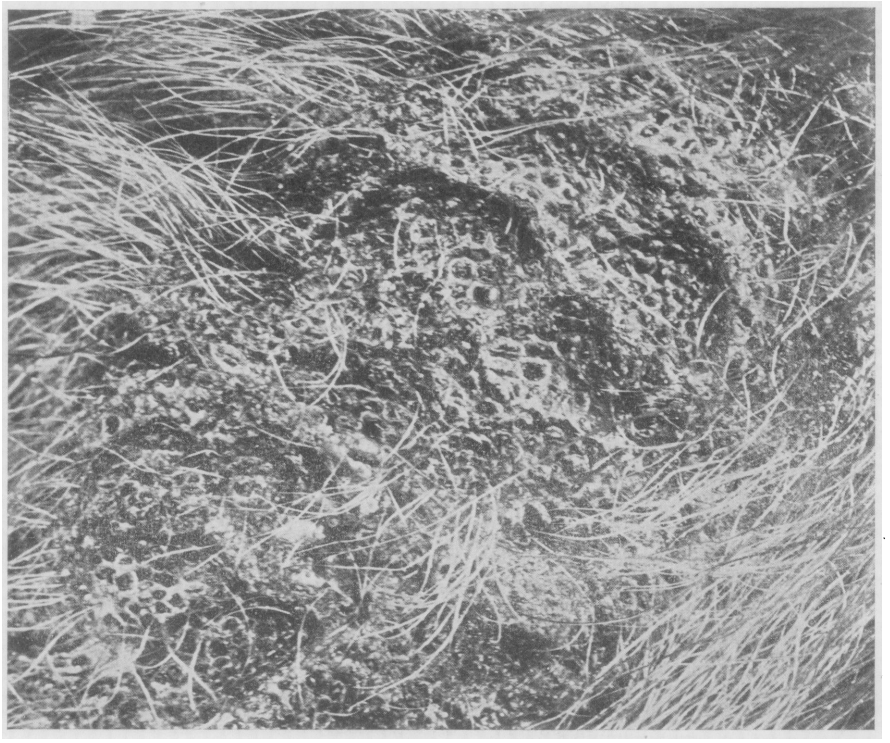


Fig. 8. *Solenodon paradoxus.* Glandular surface of left thigh. About ½.

but the chief difference is in the color of the head, sides of the neck, shoulders, and throat, which in *cubanus* are light yellow, golden yellow, or light ocher yellow, as described by Peters, Gundlach, Poey, and Dobson, or nearly pure white, as in two alcoholic specimens in the U. S. National Museum collection (Nos. 15526, adult female, and 15527, quarter-grown young, possibly somewhat faded), in abrupt contrast with the color of the back; in *paradoxus* the head is lighter colored than the dorsal area, but is not in

abrupt contrast with it; the dark rufous of the head becomes somewhat lighter anteriorly, but on the sides of the neck, shoulders, and breast passes into deep rufous chestnut, very unlike the light yellow of these parts in *cubanus*.

The pelage is much heavier — longer and thicker — and more woolly in *cubanus* than in *paradoxus*, in which latter species the nose, facial region and feet are also much more thinly clothed.

The well marked differences in the skull and teeth, noted below, have long been known, and show that instead of the two forms being only "local varieties," as suggested by Dobson, they are really not closely related, and might well be regarded as referable to different subgenera.

TABLE III. COMPARATIVE MEASUREMENTS OF SKULLS OF *Solenodon paradoxus* AND *S. cubanus*.

	S. paradoxus.			*S. cubanus.*			
	♂[1]	♂[2]	♀[3]	♀[4]	♀[5]	♀[6]	♂[7]
	mm.	mm.	mm.	mm.	mm.	mm.	mm.
Occipito-nasal length	—	87	88	77	80	87	—
Condylo-basal length	—	79	76	73	75	—	—
Basal length	74.3	75	72	69	71	73.7	69.9
Basilar length	—	69	67	62	62.5	—	—
Palatal "	44	44	43	41.5	43	45	43.2
Palatilar "	—	38	37	34	34.5	—	—
Breadth at zygom. proc. of maxilla	31.5	36	34	31.5	31.5	34.7	—
" " " " " squamosal	30.3	36	31	31	32.5	33.5	31.7
Interorbital breadth	17.7	15	15	15.2	15	19.6	15.2
Mastoid "	—	28	27.3	26.3	27	—	—
Breadth of occip. condyles	—	17	17	15.6	17	—	—
Breadth (transv.) of occip. crest	—	20.5	20	19.7	17.2	—	—
Breadth of rostrum at ant. border	—	9	9	7.2	7.6	—	
" " " " canines	?8.7	12	12	10	10	?9.4	—
Distance outside to outside of third molars	23	22	22	18	18.2	12	—
Palatal border to foramen magnum	—	30	30	27	27.3	—	—
" " " hamular process	—	10	10	11.3	—	—	—
Length of upper toothrow	39	40	39	35	36	39	38.1
Space occupied by incisors	—	13.5	14	11.2	11	—	—
" " " c–p 1-3	—	16	15	14.7	15	—	—

[1] *S. paradoxus*. Type, ♂. Measurements from Peters, *l. c.*, pp. 11, 12.
[2] *S. paradoxus*, old ♂, No. 28270. Measurements from the specimen.
[3] *S. paradoxus*, old ♀, No. 28271. Measurements from the specimen.
[4] *S. cubanus*, ♀, No. 37983, U. S. Nat. Mus. Measurements from specimen.
[5] *S. cubanus*, ♀, No. $\frac{2382}{2383}$ U. S. Nat. Mus. Measurements from specimen.
[6] *S. cubanus*, Type, ♀. Measurements from Peters, *l. c.*, pp. 11, 12.
[7] *S. cubanus*, ♂, Hunterian Museum. Measurements from Dobson, 'Monograph of the Insectivora,' p. 90.

(*Table III continued.*)

Space occupied by p^3–m^3	15.3	15.5	16	12	12	12.2	—
" " " molars	—	10	10.3	7.5	7.7	—	—
Lower jaw, length (to angle)	—	56.6	55	49.6	50		
" " height at condyle	—	13.5	14	12	7.3	—	—
" " " " coronoid	25.5	25.2	26	23	24	28	25.4
Length of lower toothrow	33	36	35	32	32.4	30.5	33
Space occupied by incisors	—	7	7	7	7	—	—
" " " c–$p_{1\text{-}3}$	—	15	15	14	15	—	—
" " " molars	—	13	13	10	10.3	—	—
" " " p_3–m_3	17	17	17.3	13.6	14	15	—

In cranial characters and dentition, as long since pointed out by Peters (*l. c.*), the two species are exceedingly distinct. *S. paradoxus* has a much larger, heavier, and more massive skull, both relatively and absolutely, in comparison with the general size of the animal, as is well shown in Plates XXIX–XXXI. The posterior rudiment of the zygomatic arches is much more developed and ends in a long slender point, in one of the three known adult skulls, but is less developed in the others. The interpterygoid fossa in *paradoxus* is shallow, and much *wider in front* than posteriorly; in *cubanus* it is much deeper and one third to one half *narrower in front* than posteriorly; and the pterygoids are not only broader in *cubanus* but extend much further back, and the hamular processes are also much more developed and more posterior in position. The interorbital region is relatively much broader in *cubanus*. In *S. paradoxus* the proboscis is supported at base by a bony subquadrate plate,[1] 5 mm. wide and 4 mm. long (in the old female; slightly smaller in the somewhat younger male), which is wholly lacking in *S. cubanus*, or merely represented by somewhat hardened or 'horny' cartilage. In other features of the skull the two species show close resemblance.

The differences in dentition are correlated with those of the skull, the individual teeth being about twice as massive in *paradoxus* as in *cubanus*, but have the same details of form. The intervals, however, between i^1 and i^2, and between i^3 and the canine, are somewhat greater in *cubanus* than in *paradoxus*.

Neither of the two skulls of *S. cubanus* before me shows any palatal vacuity, the palatal floor being uniformly ossified throughout (excepting, of course, the usual foramina); in *S. paradoxus* both adult skulls show a very small longitudinal vacuity in the palatines, but they look more like accidental fractures than normal vacuities. As the young skull of *S. paradoxus* has the palatines completely ossified, it seems probable that this is the normal condition. The female skull of *S. paradoxus* has a very large

[1] Called 'os proboscidis' by Brandt, by whom it is well described and figured.

vacuity on each side of the basal third of the rostrum (see XXXI, Fig. 1), but as such vacuities are absent in all other known skulls of *Solenodon*, they are evidently abnormal or pathological.

In correlation with the heavy ossification of the skull and the presence of an 'os probocidis' in *S. paradoxus*, the hyoid bones and all of the laryngial cartilages are densely ossified (Fig. 9).

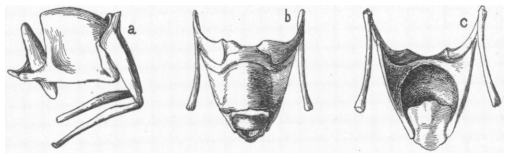


Fig. 9. *Solenodon paradoxus.* Hyoid bones and ossified larynx. Nat. size.

The milk-dentition in *Solenodon* has been described and figured by Lesche,[1] on the basis of *S. cubanus*, but his illustrations do not form a very satisfactory basis for comparison, only a lateral view of the teeth being given, without any indication of the maxillary-premaxillary suture. The figures indicate slight differences in the form of the teeth from what is seen in *S. paradoxus*. His descriptions are comparative with the milk-dentition of the Centetidæ, and are thus not definite and detailed.

All the milk teeth of the upper mandible were present and in place except the canine and dp^3, which had fallen out by masceration, but were preserved. The permanent tooth is visible at the bottom of the sockets, in each case. The canine and dp^3 were, however, easily replaced, and are shown *in situ* in Plate XXXII. The formula of the milk dentition is I $\frac{2}{3}$, C $\frac{1}{1}$, P $\frac{3}{3}$ = $\frac{7}{7}$ = 14. Id^1 is not larger than id^2 or id^3, but differs from them in shape, being three-sided, with the inner face convex, and the longer diameter transverse to the axis of the premaxillæ. Pd^3 is slightly larger than pd^2; both are conical, with a well developed cingulum. The maxillo-intermaxillary suture separates dp^3 and the canine. The canine is similar in form to the adjoining incisor and slightly smaller; consequently many times smaller than the permanent canine. Dp^1 is similar in form to p^1 and nearly as large; dp^2 is about one half the size of p^2 and of similar form. Also dp^3 has the same form as p^3 and is about two thirds as large.

In the lower jaw id_1 and id_3 have the same form and nearly the same size as i_1 and i_3; but dp_2 is a small tooth, rather long, laterally flattened and sharp-edged, but wholly lacks the inner groove so conspicuous in i_2, and is only about one tenth as large. Cd is very small — a mere point, while pd_1 is nearly as large as p_1 and of the same form; dp_1 has fallen out and its successor protrudes above the alveolus; it has been preserved and

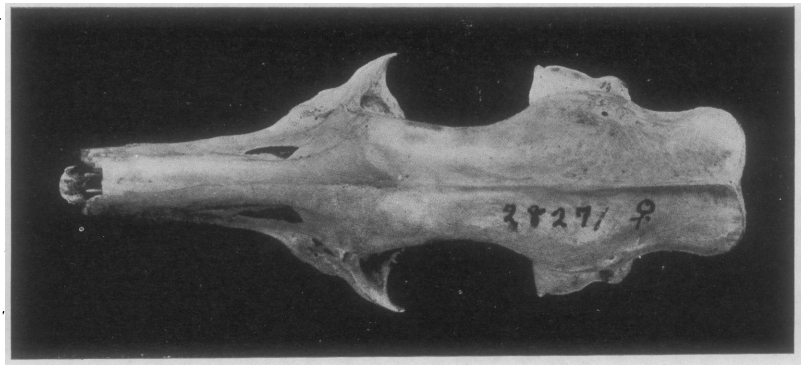
[1] Enwicklungsgeschichte des Zahnsystems der Säugetiere, Part II, Heft 2, 1907, pp. 55, 56, pl. iv, figs. 55, 56.

is a minute conical tooth (not shown in the photograph, Pl. XXXII); dp_3 is a relatively large tooth, similar in form to p_3, but about one half smaller.

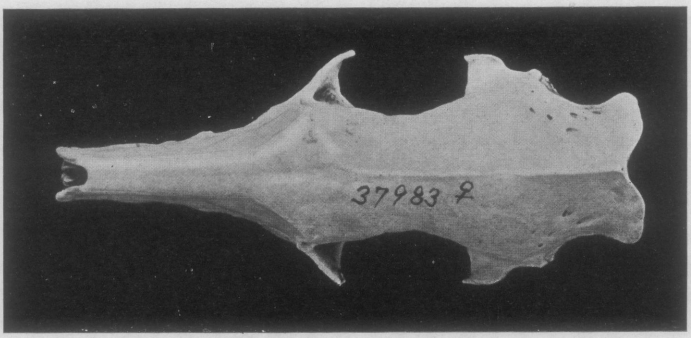
As complete ankylosis of the bones of the skull in *Solenodon* occurs quite early in the life of the animal, photographs of a young skull of *S. paradoxus* are here given (Plate XXXIII) showing the principal sutures at the stage when the milk dentition is still in situ.

For use of specimens of *Solenodon cubanus*, for comparison with *S. paradoxus*, I am indebted to the kindness of the authorities of the U. S. National Museum, through Dr. Frederick W. True, Head Curator of the Department of Biology. These specimens comprised two examples in alcohol, No. 15526, ♀ ad., and No. 15527, ♂ juv., about one fourth grown, from the Sierra Maestra, Cuba, collected by the late Dr. Juan Gundlach; also an adult female skull (No. 37983, from No. 15526, in alcohol) and another adult female skull (No. $\frac{2230}{1398}$), with locality simply "Cuba, Prof. Poey."

SOLENODON PARADOXUS.
Mounted Group at American Museum.



1.



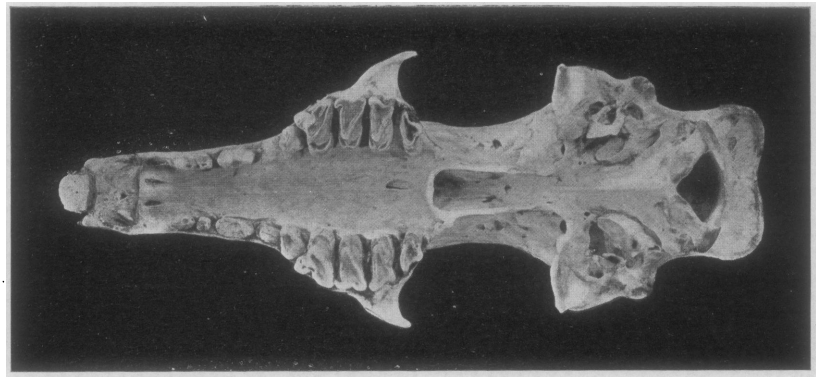
2.

3.

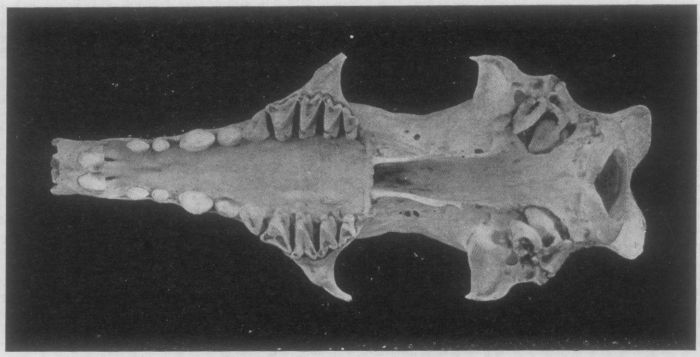
SOLENODON.

Figures natural size.

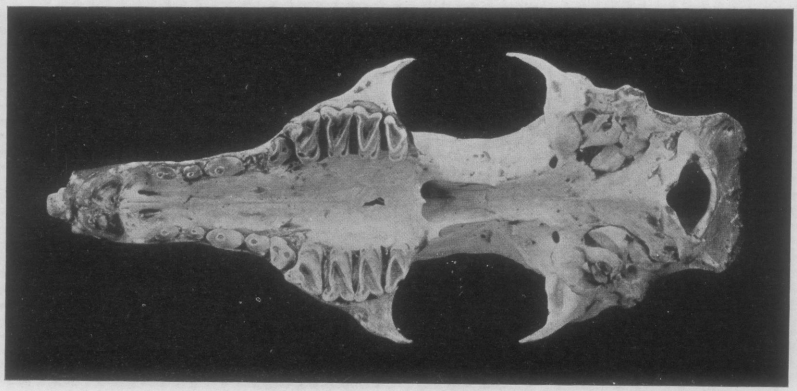
Fig. 1. *S. paradoxus*, Am. Mus. No. 28271, ♀.
Fig. 2. *S. cubanus*, U. S. Nat. Mus. No. 37983, ♀.
Fig. 3. *S. paradoxus*, Am. Mus. No. 28270, ♂.



1.



2.

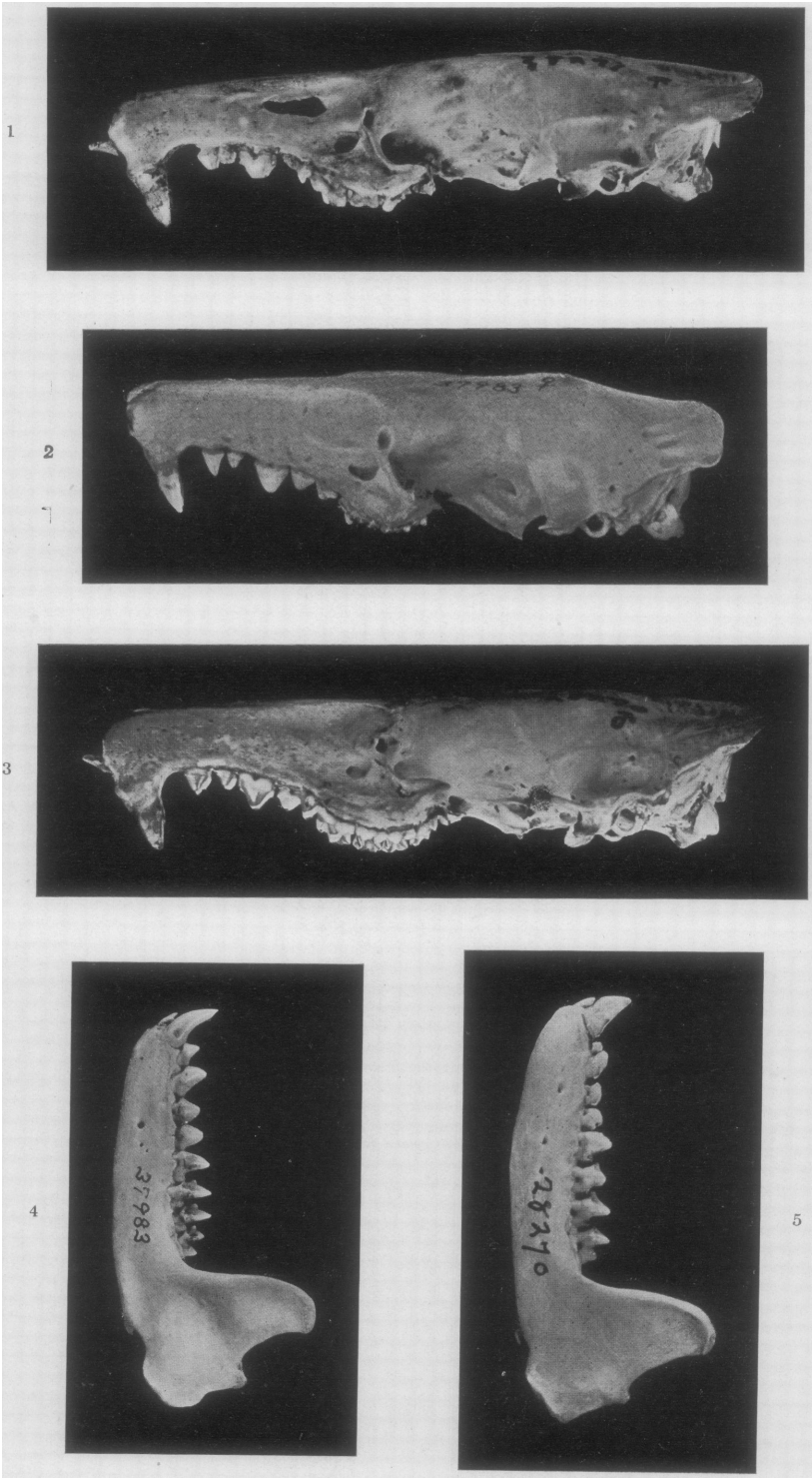


3.

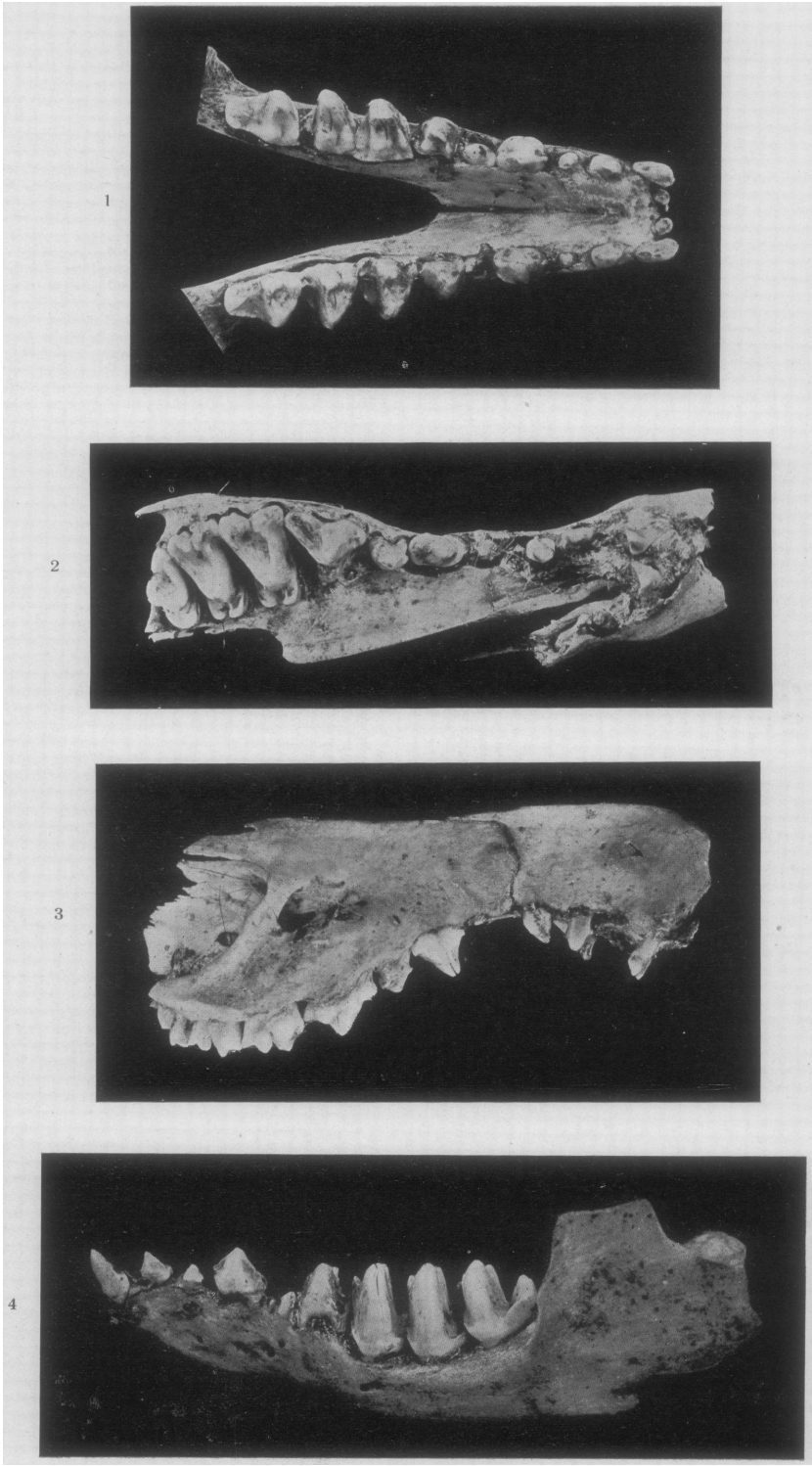
SOLENODON.

Figures natural size.

1. *S. paradoxus*, No. 28271, ♀.
2. *S. cubanus*, No. 37983, ♀.
3. *S. paradoxus*, No. 28270, ♂.



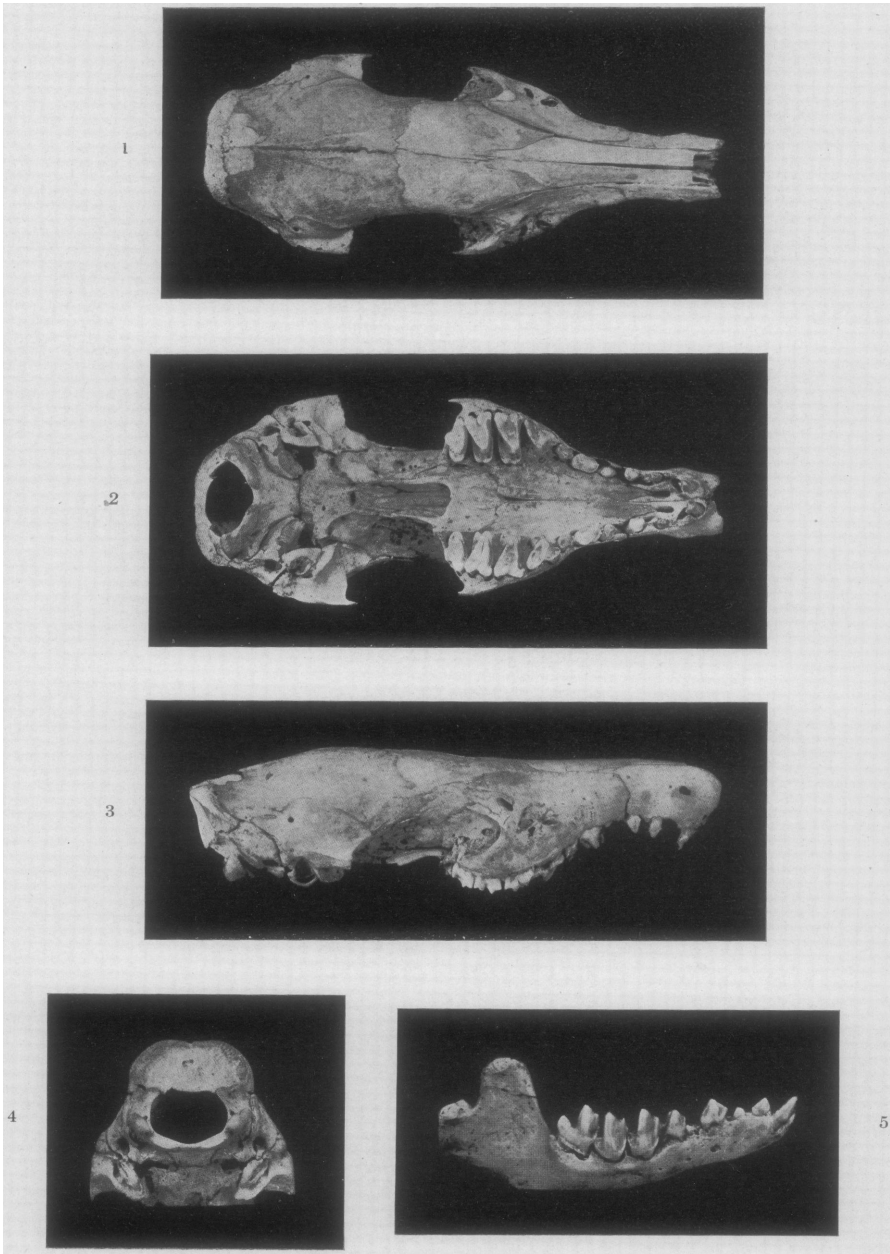
1. *Solenodon paradoxus*, No. 28271, ♀. 2 and 4. *S. cubanus*, No. 37983, ♀. 3 and 5. *S. paradoxus*, No. 28270, ♂. Figures natural size.



SOLENODON. *Milk Dentition.*

Figures twice natural size.

S. paradoxus. No. 28272.



SOLENODON.

Figures natural size.

S. paradoxus. Young skull, showing sutures. Fig. 4, slightly oblique view of occipital aspect.