



Crofaeus durissus.

a pinac.

P. S. Duval, Lith. Phil.

CROTALUS.—*Linnæus*.

GENUS CROTALUS.—CHARACTERS. Head very large, triangular, rounded in front and covered above, with small plates in front and with scales on the vertex and occiput; a deep pit between the eye and nostril; upper jaw armed with a movable fang on each side; body thick, robust; tail short, thick, and terminating in rattles, which are corneous productions of the epidermis; belly and under surface of tail covered with plates.

CROTALUS DURISSUS.—*Linnæus*.*Plate I.*

CHARACTERS. Head large, flattened above, triangular, rounded anteriorly, covered with plates only in front, and with minute scales on the vertex and occiput. There is a deep pit between the nostril and eye; upper jaw armed with poisonous fangs; body elongated and robust, above ash colour, with irregular transverse dusky bars, confluent near the tail, vertebral line yellow, flanks tinged with same colour; tail short, thick, and furnished with rattles. Pl. 177, Sc. 25.

SYNONYMES. *Crotalus durissus*, *Kalm*, Act. Stockh., ann. 1752, p. 310; 1773, pp. 52, 185.

Rattlesnake, *Catesby*, Carolina, &c., vol. ii. pl. lxi.

Crotalus durissus, *Linnæus*, Syst. Nat. Lin., vol. i. p. 372.

Crotalus durissus, *Gmelin*, Syst. Nat. Lin., vol. i. part iii. p. 1081.

Le durissus, *Lacépède*, Hist. des Serp., tom. ii. p. 423.

Crotalus durissus, *Latreille*, Hist. Nat. Rept., tom. iii. p. 190.

Crotalus atricaudatus, *Latreille*, Hist. Nat. Rept., tom. iii. p. 209.

Crotalus durissus, *Daudin*, Hist. Nat. des Rept., tom. v. p. 304, pl. lxxviii.

Crotalus atricaudatus, *Daudin*, Hist. Nat. des Rept., tom. v. p. 316.

Crotalus horridus, *Shaw*, Gen. Zool., vol. iii. p. 317, pl. lxxxviii.

Le Crotale à queue noire, *Bosc*, Nouv. Dict. d'Hist. Nat., tom. vi. p. 555.

Crotalus durissus, *Harlan*, Med. and Phys. Res., p. 132.

Banded Rattlesnake, *Vulgo*.

DESCRIPTION. The head is enormously large, triangular, but broad and truncate anteriorly, covered with plates only in front, and with minute scales on the vertex and occiput; the rostral plate is large and triangular, with its basis downwards and its apex upwards and truncate; the frontal plates are also triangular, with their bases directed backwards. There are two nasal plates; the anterior is quadrilateral and excavated behind; the posterior is lunated in front to complete the nostril. The superior orbital plates are regularly oval, the greatest extent of the oval being in the antero-posterior direction; their outer margin forms a strongly marked projection over the eye. There are thirteen labial plates to the upper jaw, those in front larger and quadrilateral, the posterior smaller and rhomboidal; above the labial plates is a row of small scales or plates, continuous with the inferior orbital. The anterior orbital is quadrilateral and very long; the posterior is of the same form, but only half the size. There are four small inferior orbital plates, which complete the lower walls of the orbit. Above the labial range is a row of small scales, that form the lower walls of a deep pit, completed above by a large lunated plate; this pit is situated midway between the nostril and the eye, but on a lower plane. The nostrils are large, and very near the snout, but open laterally. The eyes are large, and extremely brilliant when the animal is enraged; the pupil is dark, oval and vertical; the iris flame colour. The mouth is large, the jaws strong, the upper furnished with poisonous fangs. The neck is very much contracted, and covered with carinated scales, larger than those on the head. The body is elongated, but thick, and covered with rough carinated rhomboidal scales above, and broad plates below. The tail is short, slightly conical, and sustains a greater or less number of rattles.

COLOUR. The superior surface of the head is ash colour, with a brownish band

passing from the eye to the commissure of the mouth. The neck and body are pale ash colour, with a vertebral line of yellow, including three scales; behind the occiput on each side of this line is an oblong dark spot. The body is marked with a triple series of dark irregular blotches and bars along the back. In front the blotches of the vertebral series are oblong transversely, widely emarginate before and behind; they vary, however, in shape, near the middle of the body; they resemble chevrons, with an acute angle towards the head; beneath the terminations of these spots on the flanks is a row of sub-quadrate dark spots; near the tail the vertebral and lateral series unite to form a band, and between these there is another row of obsolete grey spots. The abdomen is dirty reddish-straw colour, freckled with minute black dots.

DIMENSIONS. Length of head, $1\frac{3}{4}$ inches; greatest breadth of head, $1\frac{1}{4}$ inches; length of body, 40 inches; length of tail, $3\frac{1}{4}$ inches; length of nine rattles, 2 inches; total length, $47\frac{1}{4}$ inches; greatest circumference of body, 6 inches. The specimen described had one hundred and seventy-seven large broad plates on the abdomen, and twenty-five under the tail.

HABITS. The *Crotalus durissus* lives on rabbits, squirrels, rats, &c., and in general is a remarkably slow and sluggish animal, lying quietly in wait for his prey, and never wantonly attacking nor destroying animals, except as food, unless disturbed by them. A single touch, however, will effect this; even rustling the leaves in his neighbourhood is sufficient to irritate him. On these occasions he immediately coils himself, shakes his rattles violently in sign of rage, and strikes at whatever is placed within his reach. In his native woods one may pass within a few feet of him unmolested; though aware of the passenger's presence, he either lies quiet or glides away to a more retired spot—unlike some of the innocent snakes that I have known attack passers-by at certain seasons of the year. He never follows the object of his rage, whether an animal that has unwarily approached so near as to touch him, or only a stick thrust at him to provoke his anger, but strikes on the spot, and prepares to repeat the blow, or he may slowly retreat like an unconquered enemy, sure of his strength, but not

choosing further combat. It is remarkable that he never strikes unless coiled; so that if once thrown from this position, he may be approached with less danger.

As to the fascinating or charming power of the Rattlesnake, I have every reason to believe it a fable; a modification of that of the basilisk of the ancients, "a creature whose deadly glance would alone prove fatal." Indeed, this belief in fascination does not, according to Dr. Barton, belong to the Indians, as the reply of a "much respected Delaware" to Heckwelder may prove: "The Rattlesnake obtains its food merely by slyness and a persevering patience; it knoweth as well where to watch its prey as a cat does, and it succeeds as well."

The Rev. Dr. Bachman, an excellent naturalist, also informs me that he has more than once observed Rattlesnakes watching for hours at the root of large trees, on the branches of which sported some innocent squirrel, unconscious of the "charmer below;" but woe betide him should he descend to the earth in search of water, or of fallen nuts or acorns. There are even still more tales of the charming power of the Black than of the Rattlesnake, to whom it would be useless, for he is bold, lively, active, and climbs the loftiest trees in pursuit of his prey, while the Rattlesnake waits patiently below.*

Mr. Rittenhouse once observed the peculiar melancholy, and fluttering, tremulous motion of a red-winged maize-thief, like a bird "said to be charmed." "Suspecting that it was disturbed by a serpent, he threw a stone at the place whence the noise proceeded; the bird flew away, but soon returned, and, on

* Much has been said lately about the Rattlesnake's power of climbing trees. For this his organization seems to me ill adapted; his body is thick and clumsy, the tail short, and the rattles too, which are easily broken, would form an awkward appendage in climbing; while in those snakes that climb with great facility, the body is slender, the tail very long and delicate, and may at times be used as a prehensile instrument. But a full account of the curious organization of the Rattlesnake—of its poison, and of its effects on other animals—will be given in the anatomical part of this work.

approaching, he found it perched on the back of a large Black-snake, in the act of swallowing a young bird. The snake was killed, and the old bird flew away."

Thus it is the serpent seeks the nest, or young birds; it is seen by the parent, who darts upon him in an agitated manner—makes a plaintive cry; it flies away, and again returns to attack the robber, with beak and wings, until he is driven off; or, "what not unfrequently happens, she falls a victim to maternal solicitude"—and thus ends the fascination.

If the Rattlesnake has other "charming powers," they lay in the horror of its appearance, or in the instinctive sense of danger that seizes a feeble animal fallen suddenly into the presence of an enemy of such a threatening aspect—rather than to any mysterious influence not possessed by all venomous or ferocious animals upon their weak, timid, and defenceless prey.

In Catesby's time, when the country was less settled, Rattlesnakes were common enough; and he relates stories of their entering dwelling-houses, and of one having even shared his bed, undiscovered; but his accounts are so strange at the present day, that we must suppose him deceived by the servants of the house where they are said to have occurred in February, a season at which the Rattlesnake is never abroad. At present it is rarely met with, keeping far from all settlements, where its greatest enemy, the hog, is to be found. Even sportsmen are seldom under any apprehension on their account; yet I have more than once known dogs killed by them when the hunters have penetrated into woods at a distance from settlements.

GEOGRAPHICAL DISTRIBUTION. The *Crotalus durissus* has the widest range of all our Rattlesnakes, being found in nearly all parts of the United States. Kalm saw it in lat. 45°, near Lake Champlain, and I have seen specimens from the borders of the Gulf of Mexico, and as far west as Red river; and Dr. Pickering informs me that Say met with it in lat. 40°, on the Mississippi.

GENERAL REMARKS. There can be no doubt that this animal was first made known to naturalists by Catesby, whose plate of it is too good to be mistaken. Kalm, the celebrated Swedish traveller, next observed it in the northern states of the Union, and gave an accurate scientific description of it, from which Linnæus extracted the characters that distinguish the *Crotalus durissus* of the tenth edition of his *Systema Naturæ*.

Linnæus's account of our Rattlesnake is, however, not clear, for he says it is marked with "maculis rhombois nigris disco albis," while to the South American animal he attributes the habits of the *durissus*, as taken from Kalm: "Venenatissimus, antidotum senega; aves sciurosque in faucibus revocat." The only method then remaining to determine to which animal he applied the specific term "*durissus*," is to consult his references, and then his meaning is clear; for no one doubts that Kalm described our animal, and even Seba's plate is a good one.

Shaw seems to have confounded this animal with the *Crotalus horridus*, although the greater part of his description is copied from Catesby, which could only refer to the *Crotalus durissus*, or Banded Rattlesnake, under which latter name indeed Shaws speaks of it. It is next found mentioned as the *Crotalus atricaudatus* by Bosc, who supposes it to be a new species, in which he is followed by Latreille and Daudin; but there can be no doubt at present, that they are one and the same animal, as in the young the tail is generally black, and even in the adult I have seldom seen it otherwise.

It is commonly supposed that the number of rattles mark the age of the animal, a new one being added annually to those already existing. It is now certain that Rattlesnakes have been known to gain more than one rattle in a year, and to lose in proportion; the exact number being regulated no doubt by the state of the animal as to health, nourishment, liberty, &c. I have known two rattles added in one year, and Dr. Bachman has observed four produced in the same length of time.

Mr. Peale of the Philadelphia Museum, kept a living female Rattlesnake for fourteen years. It had, when it came into his possession, eleven rattles, several were lost annually, and new ones took their place; at its death, after fourteen years confinement, there were still but eleven joints, although it had increased four inches in length. It is thus evident that the growth of these appendages is irregular, and that the age of the animal cannot be determined from their number. The number of rattles vary much; the greatest I ever saw was twenty-one, all of which were perfect.



Holbrook, John Edwards. 1842. "Crotalus durissus – Linnaeus." *North American herpetology; or, A description of the reptiles inhabiting the United States* 3, 9–15.
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