

NOTES ON THE DISTRIBUTION, HABITS AND VARIOUS
COLOUR MORPHS OF COOK'S TREE BOA (*CORALLUS ENYDRIS*
COOKII GRAY).

By: Peter Stafford, The Belvedere, Grenville Place,
London SW7, England.

Contents: Introduction - Distribution - Colour
varieties - Discussion - References.

INTRODUCTION

The tree boas (genus *Corallus* Daudin, 1803) from tropical America comprise a group of three highly developed arboreal species characterised by a slender, laterally compressed body, a large pear-shaped head well defined from the neck, greatly enlarged anterior teeth and a series of heat sensory pits between the labial scales of the upper and lower jaw. The tail is elongate and strongly prehensile.

DISTRIBUTION

Cook's tree boa (*Corallus enydris cookii* Gray, 1842) is a widely distributed form ranging over much of central and northern South America (Abuys, 1981), from Nicaragua southwards through Costa Rica and Panama to Colombia, Venezuela, northern Peru, Guyana, Trinidad and the Windward Islands. Within parts of its range it appears to be fairly common, and from the account given by Dunn (1949) is perhaps nowhere more abundant than in the Darien region of southern Panama. The snake is found in a variety of habitats and particularly among the branches of trees overhanging water, where many have been collected as they lay coiled

'asleep' during the day. Plantain and banana groves are also favourite haunts.

Corallus enydris cookii is predominantly crepuscular and nocturnal in habits, preying mostly upon small birds and bats at their roosts, other small mammals, and tree dwelling lizards. The stomach contents of a specimen collected in Panama (Sexton & Heatwole, 1965) contained the partly digested remains of a gravid female basilisk (*Basiliscus basiliscus*) and in waterside habitats it seems likely that these and other small iguanids form a large part of the diet. Frogs are also taken occasionally.

COLOUR VARIETIES

The subspecies itself is distinguished from the nominate and only other race, *Corallus enydris enydris* (Linnaeus, 1758), by its smaller size, fewer midbody, ventral and subcaudal scales, and in its more northerly distribution (see tabel 1). It is also said to differ in character of its dorsal pattern, this typically consisting of distinct rhomboid-like shapes rather than circular blotches. Both forms however are very much alike in

Table 1. Comparison of the subspecies of *Corallus enydris*.

| | <i>C. e. enydris</i> | <i>C. e. cookii</i> |
|---------------------|----------------------|---------------------|
| Ventral scales | 270 - 299 | 235 - 285 |
| Subcaudal scales | 108 - 128 | 101 - 118 |
| Midbody scale rows | 51 - 59 | 39 - 47 |
| Scales around eye | 12 - 17 | 11 - 14 |
| Approx. max. length | 2.4 m | 1.7 m |

general appearance and can be easily confused where their ranges overlap (Parker, 1935). The race *cooki* is particularly variable in colouration and extreme colour forms have been mistakenly described as separate species on more than one occasion e.g. *Boa* (= *Corallus*) *grenadensis* (Barbour, 1914), *Boa salmonidia* (Briceno, 1934) and *Xiphosoma* (= *Corallus*) *ruschenbergeri* (Cope, 1876). It has also appeared under various other synonyms but the name in its present form (Forcart, 1951) is the most widely accepted. According to Boulenger (1893) there are four main colour types, summarised as follows:

Type A (after *Corallus cookii*, Gray).

Dorsal surface pale yellowish or greyish brown with large rhomboid, dark brown blotches on the sides, sometimes centred with yellow. Upper surface of head marbled or spotted with dark brown or black. Two dark stripes on each side of the head behind eye. Lower parts yellowish spotted with brown.

Type B (var. *melanea*, Gray).

Upper surface blackish brown with a net-like pattern of yellowish lines. Underside blackish brown.

Type C.

Yellowish brown above, uniform or with only faint traces of darker markings. Underside yellow without spots.

This colour form was further described as a local race peculiar to the island of Grenada (Barbour, 1914), and given the name *Boa grenadensis*. It has since been recorded from other localities in the Grenadines and mainland tropical America and doubtlessly occurs elsewhere.

Type D (after *Xiphosoma ruschenbergeri* Cope, 1876).

Dorsal surface olive brown, some of scales yellow and forming irregular yellow lines. All scales

edged with black and black predominating on the tail. Head with only faint traces of dark markings. Lower parts yellow with a few small black spots. In his original description of *Xiphosoma ruschenbergerii*, Cope (1876) describes the underside as bright yellow and the upper surface as yellow brown with a series of brown spots on each side of the ventral scutes. Young specimens of this colour phase are usually more brightly coloured, tending to darken and develop the characteristic black tail with age. This, it would appear, is the most widely recorded form of Cook's tree boa, and is known from Colombia, Venezuela and Grenada (Boulenger, 1893), Costa Rica (Cope, 1876), Panama (Schmidt, 1933) and Trinidad (Brown, 1893). For a good colour picture of this form see Abuys, 1981.

DISCUSSION

While certain colour varieties of *Corallus enydris cookii* may predominate in some areas, there does not seem to be any consistent pattern in the distribution of colour forms across the length and breadth of its range. The greatest variation in colour is perhaps chiefly manifested among the insular populations of Trinidad, Sint Vincent and the Grenadines. Garman (1887) lists three different types from the island of Grenada alone. Two other varieties have been described from Sint Vincent (types A and B), and at least five from Trinidad: a light yellowish olive form clouded with brown; another with no markings at all; a reddish brown form with yellow blotches and occasional white or yellow scales (Brown, 1893), and types B and D (Boulenger, 1893). Mole (1924) provides a further account of variation in Trinidad and by way of comparison describes specimens from Grenada as more uniformly coloured and

generally smaller.

Considerable variation also occurs on the continental mainland. Beebe (1946) made a collection of some half a dozen specimens within a quarter of a square mile of rainforest near Kartabo, Guyana (formerly British Guiana), two of which are described as varying from uniform buff brown (type C) to light greyish olive with alternating darker blotches (type A), and two more from Venezuela, one of which broadly complies with type D and the other with type A.

The fact that entirely different colour varieties of Cook's tree boa occur together is somewhat indicative of polymorphism in this snake. The wide range of colours exhibited by this subspecies however, is more a product of natural variation, and it is quite common to find an assortment of differently coloured offspring in a single brood, even if both parents are of the same colour type (Mole, 1924; Stafford, 1981).

REFERENCES

- Abuys, A., 1981. De systematiek en kenmerken van de slangen van het genus *Coralus*. Litt. Serp., Vol. 1 (6): 222-237.
- Barbour, T., 1914. A contribution to the zoogeography of the West Indies, with special reference to Amphibians and Reptiles. Mus. Mus. Comp. Zool., Vol. 44 (2): 429-435.
- Beebe, W., 1946. Field notes on the snakes of Kartabo, British Guiana, and Caripito, Venezuela. Zoologica, Vol. 31 (1): 11-52.
- Boulenger, G.A., 1893. Catalogue of the snakes in the British Museum (Natural History). Vol. 1. Longmans & Co., London.
- Brown, A.E., 1893. Notes on some snakes from tropical America lately living in the

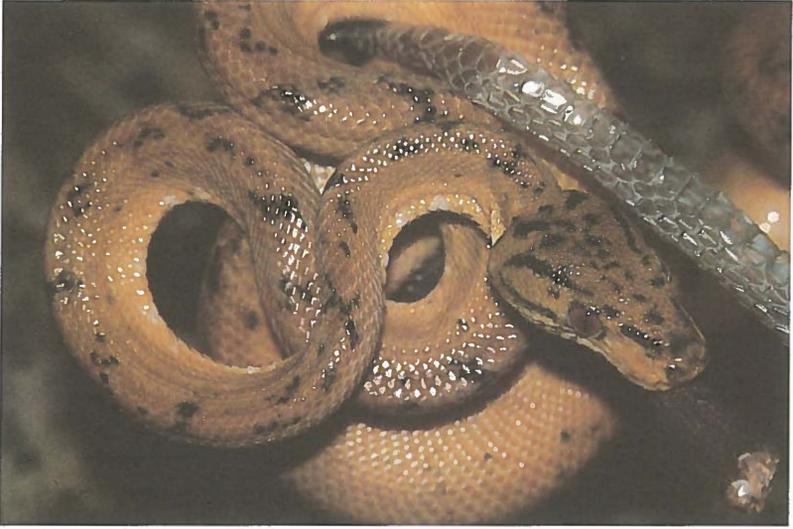


Fig. 1. *Corallus enydris cookii* (colour type C).
Foto: Peter Stafford.



Fig. 2. *Corallus enydris cookii*. Grenada. Foto:
J. van der Pols.

- collection of the Zoological Society of Philadelphia. Proc. Acad. Nat. Sci. Philad., 1894: 429-435.
- Cope, E.D., 1876. On the Batrachia and Reptilia of Costa Rica. J. Acad. Nat. Sci. Philad., Vol. 8 (2): 93-154.
- Dunn, E.R., 1949. Relative abundance of some Panamanian snakes. Ecology, Vol. 30: 39-57.
- Forcart, L., 1951. Nomenclature remarks on some generic names of the snake family *Boidae*. Herpetologica, Vol. 7: 197-199.
- Garman, S., 1887. On West Indian reptiles in the Museum of Comparative Zoology at Cambridge, Mass. Proc. Am. Phil. Soc., Vol. 24 (126): 278-286.
- Mole, R.R., 1924. The Trinidad snakes. Proc. Zool. Soc. London, 1924: 235-278.
- Parker, H.W., 1935. The frogs, lizards and snakes of British Guiana. Proc. Zool. Soc. London, 1935: 505-530.
- Schmidt, K.P., 1933. Amphibians and reptiles collected by the Smithsonian Biological Survey of the Panama Canal Zone. Smithsonian Misc. Coll., Vol. 89: 1-20.
- Sexton, O.J. & H.F. Heatwole, 1965. Life history notes on some Panamanian snakes. Caribbean J. Sci., Vol. 5: 39-43.
- Stafford, P.J., 1981. Observations on the captive breeding of Cook's tree boa (*Corallus enydris cookii*). The Herpetile, Vol. 6 (4): 15-17.