Catalogue of American Amphibians and Reptiles.

TELFORD, SAM R., JR. 1980. Tantilla relicta

Tantilla relicta Telford Florida crowned snake

Tantilla coronata wagneri: Blanchard, 1938:370 (in part). See REMARKS.

- Tantilla relicta Telford, 1966:270. Type-locality, "on the south side of Babson Park, Polk County, Florida." Holotype, University of Florida Collections 12421, adult female, collected 26 December 1960 by Sam R. Telford, Jr. (examined by author).
- CONTENT. Three subspecies are recognized: relicta, neilli, and pamlica.
- DEFINITION. Tantilla relicta is a small member of the genus (maximum snout to vent length 190 mm in males, 194 mm in females) with a uniform pale to dark tan or reddish brown dorsum (dorsal color grading into pale ventral coloration). Head pattern varies among populations from completely black with no parietal pale areas to a prominent pale parietal band separating the black head cap from the black nuchal collar (1-9 scales in length, mean 4.4). Pale areas may extend forward along the outer parietal edge. The head is distinctly pointed with countersunk lower jaw varying to narrowly rounded with non-countersunk jaw. The hemipenis possesses one basal hook, positioned posterolaterally in the basal third of the organ adjacent to the sulcus spermaticus. The ventrals number 115 to 142, subcaudals 39 to 67. Dorsal scale rows number 15 throughout. The head scales consist of one preocular, two postoculars, one anterior and posterior temporal, six or seven supralabials (3rd and 4th entering orbit), and six infralabials (four in contact with anterior chinshields). The posterior chinshields are two-thirds the length of the anterior pair, which are in contact or not with the mental. The anal plate is divided. Maxillary teeth number 14 to 16, usually 15.
- DESCRIPTIONS. Telford (1966) provided details of scutellation, coloration, external and hemipenial morphology, dentition, and variation of all three subspecies. The description of *T. coronata wagneri* by Wright and Wright (1957), based upon specimens from central Florida, clearly describes *T. relicta*, but other general descriptions in the literature may be based in part upon *T. coronata* or *T. oolitica*. Brief descriptions of all three subspecies are given by Conant (1975).
- ILLUSTRATIONS. Drawings of head pattern and hemipenis are given by Telford (1966). Black and white photographs (designated T. coronata wagneri) appear in Wright and Wright (1957). Conant (1975) provided a photograph of T. relicta neilli and figures of head pattern for all three subspecies. Color photos of T. r. relicta and T. r. neilli are in Behler and King (1979).
- DISTRIBUTION. Peninsular Florida from southern Palm Beach, Highlands, and Charlotte counties north to Duval (presumably, see COMMENT), Columbia, and Taylor counties.
- Fossil Record. Fossils reported by Auffenberg (1963) as *T. coronata* from two middle or late Pleistocene sites in north-central Florida may refer to this species.
- PERTINENT LITERATURE. Telford (1966) described the species and provided information on ecology and sexual maturity, and suggested a possible explanation of the species' origin. Further information on its ecology appears in Wright and Wright (1957) and Carr (1940) under accounts of Tantilla coronata wagneri. Bovee and Telford (1962) described a flagellate, Monocercomonas tantillorum from T. relicta (as T. coronata wagneri) from central Florida. Conant (1975) provided brief accounts and range maps for each subspecies.
- ETYMOLOGY. The specific name relicta is a Latinized reference to the probable origin of the species as a relict on islands of Pleistocene age or earlier. The subspecific name neilli honors Wilfred T. Neill, while pamlica refers to the geological designation of its habitat, Pamlico terrace.
- REMARKS. Blanchard (1938) referred peninsular Florida populations to Tantilla coronata wagneri. The subspecific name

wagneri, however, was placed in the synonymy of *T. coronata* by Telford (1966), who applied the name *relicta* to a segment of these populations.

1. Tantilla relicta relicta Telford

Tantilla relicta relicta Telford, 1966:278. See species synonymy.

• DEFINITION. A subspecies of *Tantilla relicta* which has a predominantly banded parietal pattern (87 percent) followed by a nuchal collar usually 4 scales long at midline (1-5, mean, 3.4 scales). The head is pointed in outline with a countersunk lower jaw. Ventrals number 117 to 134, subcaudals 40 to 59, and tail length is 18 to 24 percent of total length.

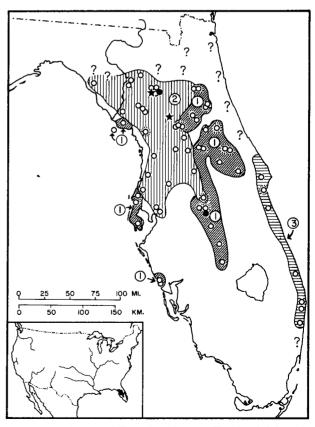
2. Tantilla relicta neilli Telford

Tantilla relicta neilli Telford, 1966:279. Type-locality, "University of Florida campus, Gainesville, Alachua County, Florida." Holotype, University of Florida Collections 12406, adult male collected 12 July 1961 by John Funk (examined by author).

• DEFINITION. A subspecies of *Tantilla relicta* characterized by a non-banded parietal pattern and a long tail (19-29 percent of total length). The head is narrowly rounded in outline and the lower jaw is not noticeably countersunk. Ventrals number 123 to 142 and subcaudals 46 to 67. Fifteen percent of specimens have pale parietal spots larger than a dorsal scale in size, but these do not fuse to form a band. The black parietal area fuses with a black nuchal collar which is usually 5 scales long at midline (3-8, mean, 4.8 scales).

3. Tantilla relicta pamlica Telford

Tantilla relicta pamlica Telford, 1966:280. Type-locality, "approximately 1 mile south of Boynton Beach, Palm Beach



MAP. Distribution of *Tantilla relicta* in Florida. Solid circles mark type-localities; open circles indicate other records. Stars locate Pleistocene fossils possibly referable to *relicta*. Inferred areas of secondary intergradation are stippled.

County, Florida." Holotype, University of Florida Collections 12430-2, adult female, collected 4 February 1960 by Robert H. Mount (examined by author).

• DEFINITION. A subspecies of *Tantilla relicta* with pigmentation of the head greatly reduced in the majority of specimens (60 percent), resulting in a wide parietal pale band which is followed by a narrow nuchal collar usually 3 scales in width (2-5, mean, 3.7) Ventrals number 115-129, subcaudals 45-51, and tail length is 20-24 percent of total length. The head is prominently pointed in outline with a countersunk lower jaw.

COMMENT

Tantilla relicta relicta and T. r. neilli are ecologically separated when in apparent sympatry, with the former found in scrub and the latter in sandhills and mesic hammock. Along the southern central ridge (Lake Wales, Polk County south), where neilli does not occur, relicta may be found in sandhills. Telford (1966) suggested that a banded head pattern confers selective advantage through protection from avian predators by breaking up the head outline when T. relicta basks with the head exposed at the surface of white sand areas in scrub. No disadvantage would result from exposing dark heads in sandhills or mesic hammocks where vegetation is more abundant. Intergradation between T. relicta relicta and T. r. neilli is probably not continuous in view of their ecological separation, but resembles secondary intergradation in some areas where two long-separated populations may have been in longest contact. Most specimens difficult to assign to either subspecies come from the vicinity of Lake George, Marion County, in the area of the former Suwannee Straits.

Since T. relicta was described, additional specimens have been obtained which demonstrate that it occurs well north of the Suwannee River, indicating that the apparent hiatus in distribution of Tantilla in Florida between the Suwannee and Appalachicola rivers may be inhabited by T. relicta neilli. No records demonstrate contiguity of this species with T. coronata to the north, whereas all Tantilla collected west of the Appalachicola are clearly T. coronata. No specimens have been seen from Duval County, although sight records suggest that Tantilla occurs there. Their identity could clarify the distribution of T. relicta to the northeast.

The southernmost *Tantilla* population in the central ridge of Florida, at Archbold Biological Station, Lake Placid, Highlands County needs study to determine its status. All specimens examined (11) show six supralabials, a condition found in only four of 154 *T. relicta* examined when preparing the 1966 study. The decreased pigmentation of the head parallels that characteristic of *T. relicta pamlica*. No Archbold apecimens were extant when material was examined for the 1966 study.

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