

Catalogue of American Amphibians and Reptiles.

TELFORD, SAM R., JR. 1969. *Neoseps* and *N. reynoldsi*.*Neoseps* Stejneger
Sand skink*Neoseps* Stejneger, 1910:33. Type species, *Neoseps reynoldsi* Stejneger, 1910, by monotypy.

- CONTENT. One Recent species, *N. reynoldsi*, is recognized.
- DEFINITION. A scincid genus with moveable eyelids, the lower eyelid containing a transparent window; no external ear opening; supranasals present; no frontoparietals; nostril between nasals; palatine bones separated along median line of palate; digits reduced to one on fore limbs and two on hind limbs.
- DESCRIPTIONS, ILLUSTRATIONS, DISTRIBUTION, FOSSIL RECORD, and PERTINENT LITERATURE. See *Neoseps reynoldsi*.
- ETYMOLOGY. The generic name *Neoseps* is derived from Greek and Latin and means "new lizard."

COMMENT

The affinities of *Neoseps* to other skink genera are unknown. Stejneger (1910:33) suggested a probable relationship to *Sphenoscincus* (= *Ophiomorus*) of the Middle East. However, it is evident that the requirements of fossorial existence in surficial layers of sand make it difficult to distinguish between relationship and convergence in these skinks. On the basis of some minor morphological and ecological similarities, Telford (1959:113) suggested derivation of *Neoseps* in central Florida from an ancestral form similar to *Eumeces egregius*.

Neoseps reynoldsi Stejneger
Sand skink*Neoseps reynoldsi* Stejneger, 1910:34. Type locality "near Spring Lake, Fruitland Park, Lake County, Florida." Holotype, U. S. National Museum 42147, collected by A. G. Reynolds in March, 1910.

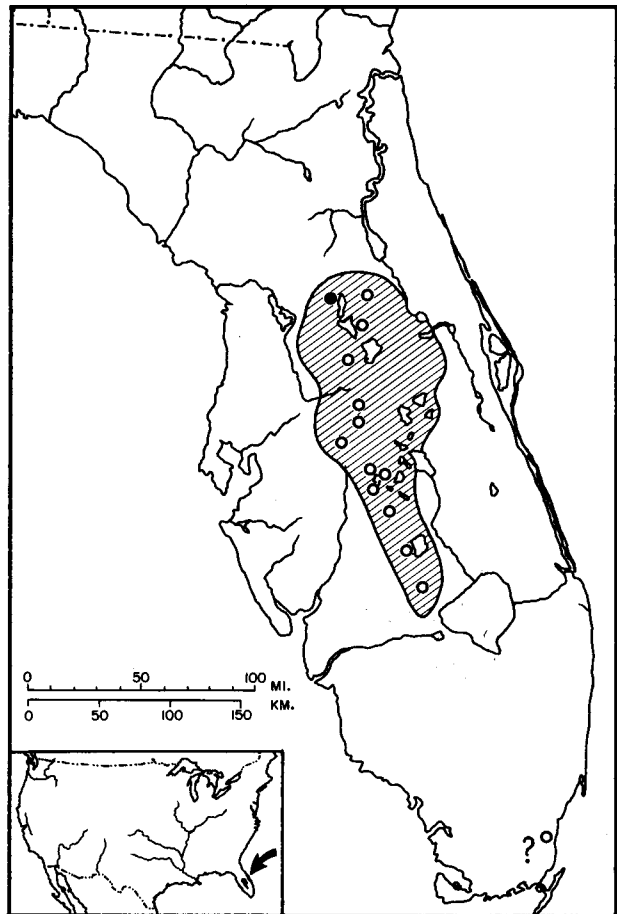
- CONTENT. No subspecies are recognized.
 - DEFINITION. The only known species; see characters listed for *Neoseps*.
 - DESCRIPTIONS. The scales are smooth and shiny, in 14 to 17 (mean 16) rows. Prominent ventrolateral keels are present, giving a flattened appearance to the venter. The flattened venter is covered by the four ventral scale rows, and about half of the ventrolateral rows. The two midventral rows are slightly narrower than the others. The snout is shovel shaped and the lower jaw countersunk. The fore limbs are about one-third the length of the hind limbs, and each has a single digit. Two digits are present on each hind limb, the larger digit four times the length of the smaller. A slight axillary depression is present, into which the fore limbs fit during locomotion.
- The rostral is broader than long. There are two internasals, two nasals, and a single prefrontal, broader than long. The frontal is slightly longer than broad, and the prominent interparietal is nearly equal in size to the parietals. The loreal extends from the nasal into the orbit, its width one-third of its length. There are no preoculars, three supraoculars, one small postocular, and a single temporal. The supralabials usually number 5-5, with III and IV entering the orbit. Six very small supraciliary scales, and four narrow suboculars are present (Stejneger, 1910:34 stated "no superciliaries"). The mental is broader than long. There are usually 4-4 infralabials, two undivided chinshields (posterior largest, both broader than long), and two gular plates bordering the infralabials. The anal plate is divided, and a single row of subcaudals is enlarged. Maximum snout-vent length is 65 mm; hatchling length is 24 mm snout-vent. Unregenerated tails comprise 47 to 54 percent of the total length; the means for males and females, respectively, are 50.5 and 49.6 percent. Regenerated tails were present in 69 percent of 135 specimens examined (Telford, 1959).

Living specimens vary in coloration from dirty white to deep tan, often becoming dark brown after preservation. At hatching a wide black band extends from tail tip to snout along each side. In older lizards this band may be reduced to spots along the three lateral scale rows, or disappears except from eye to snout. Some specimens have a dark spot on every scale of dorsum and venter. There is no significant sexual dimorphism in scalation or coloration.

Burt (1937), Carr (1940), Smith (1946) and Carr and Goin (1959) provided descriptions of *N. reynoldsi*.

- ILLUSTRATIONS. Sketches of habitus and line drawings of diagnostic characters were presented by Stejneger (1910) and Burt (1935), and were republished in Smith (1946). Photographs were provided by Smith (1946), Pope (1955), A. Schmidt (1955), Conant (1958), and Carr and Goin (1959). Telford (1959) presented drawings of limb osteology.
- DISTRIBUTION. *Neoseps reynoldsi* occurs in rosemary scrub and sandhills habitats in Lake, Polk and Highlands counties, Florida. Records from Alachua and Dade counties are erroneous or questionable (see Comment). Telford (1962) provided a list of the localities where *Neoseps* has been collected.
- FOSSIL RECORD. None.

- PERTINENT LITERATURE. Carr (1940:77) presented the first information on habits and habitat of *Neoseps*. Cooper (1953) and Telford (1959, 1962) provided detailed discussions of its ecology. Distribution and biogeographic significance were treated by Neill (1957), Goin (1958) and Telford (1965).



MAP. The solid circle marks the type-locality; open circles indicate other localities, one of which is questioned (see Comment). Shading estimates the total range.

Morphology was described by Stejneger (1910), Burt (1937), Smith (1946), Conant (1958), Carr and Goin (1959), and Telford (1959). Myers and Telford (1965) described the food of *Neoseps* and Mount (1963) compared the food of *Neoseps* and *Eumeces egregius*. Inquilinic protozoans of *Neoseps* were described by Bovee and Telford (1962a, 1962b).

• **ETYMOLOGY.** The name *reynoldsi* honors the collector of the holotype, A. G. Reynolds.

• **REMARKS.** Myers and Telford (1965) demonstrated that *Neoseps* has a highly restricted diet, composed primarily of beetle larvae and termites. Its well-defined microhabitat within a relatively xeric macrohabitat of limited geographic extent suggests a long history in central Florida, but this history is still undocumented by the fossil record. The distinctive and limited endoparasitic fauna of *N. reynoldsi* includes two endemic flagellate protozoans, *Monocercomonas neosepsorum* and *Rigidomastix scincorum* (Bovee and Telford, 1962a, 1962b), and an undescribed species of *Thelandros* (Myers and Telford, 1965), a highly host-specific genus of oxyurid nematodes. The only components of its parasitic fauna shared with other species of the community are normally free-living hartmannellid amoebas and ectoparasitic trombiculid mites.

COMMENT

Citation of the occurrence of *Neoseps* in Dade County, Florida should be discontinued. No additional specimens have been obtained since 1932 despite extensive collecting (Duellman and Schwartz, 1958; Telford, 1959), and the habitat at the reported locality appears unsuitable for *Neoseps* (Telford, 1962). Evidence of *Neoseps* in Ocala National Forest would be welcome, in view of the rapidity with which its habitat is being destroyed in other areas.

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