

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW TEXAS SUBSPECIES OF THE LIZARD GENUS
HOLBROOKIA.

BY FRANCIS HARPER.

Field work in southern Texas in 1929 by the Woolston Expedition of the Academy of Natural Sciences of Philadelphia indicated that Padre Island specimens of *Holbrookia propinqua* Baird and Girard represent a hitherto unrecognized subspecies. This may be known as

Holbrookia propinqua stonei, subsp. nov.

PADRE ISLAND HOLBROOKIA.

Type.—No. 19879, Academy of Natural Sciences of Philadelphia; adult male; north end of Padre Island, Texas; taken July 20, 1929, by B. P. Roberts; orig. no. 52b (F. H.).

Diagnosis.—Paler (adult males) and larger (both sexes) than *H. p. propinqua* Baird and Girard.

Geographical range.—Padre Island (and doubtless Mustang Island), Texas.

Description of type.—Scalation similar to that of *H. p. propinqua*. Color in spirits: top of head buffy citrine; ground color of upper parts (including limbs and tail) olive-gray; dorso-lateral region with numerous white spots, having a maximum diameter of about 1 mm.; these spots more or less equally spaced and with a tendency toward arrangement in oblique rows; spots practically absent from a median dorsal area 4-5 mm. wide, but extending on to femur and basal part of tail; otherwise, upper side of limbs with scarcely a trace of spots or bars; two oblique dense black bars on each side, 5-6 mm. in length and 1.5 mm. in maximum width; the anterior bar just reached by the appressed elbow; lower jaws and throat faintly marked with deep gull gray; rest of under parts white.

Total length, 133 mm.; snout to vent, 58; tail, 75; hind leg, 46; hind foot, 22; width of head, 11; femoral pores, 14 on each side.

Remarks.—Other adult males from Padre Island are very similar in coloration, but some of them show the following additional characters: faint traces of about 11 pairs of dorso-lateral blotches, extending from nape

to basal part of tail; one or two additional but smaller oblique black bars on the side; and very faint bars on the limbs. In several the deep gull gray of the throat region is more pronounced, becoming an almost solid color and extending to the front of the shoulder. The extreme and average measurements of five adult males (including the type) are: total length, 125–141 (131.8); snout to vent, 51–59 (55.9); tail, 73–82 (75.9); hind leg, 45–47.5 (46.2); hind foot, 22–23 (22.3); width of head, 10–11 (10.4); femoral pores, 12–15 (13.7). (Another male, not included in the above measurements, has as many as 18 femoral pores.)

Two adult females are scarcely distinguishable from adult mainland females except by larger size. Color in spirits: top of head as in adult male; median dorsal area light drab to drab-gray, changing to light olive-gray on upper sides; paired oblique rows of faint, tiny white spots (in one specimen only) in dorso-lateral region, from nape to basal part of tail; no trace of oblique lateral bars; under parts as in males, but lower sides washed with reddish (noted in fresh specimens and still somewhat apparent in preserved specimens); no bars on limbs. Measurements of two adult females: total length, 123, 121; snout to vent, 59.5, 59; tail, 63.5, 62; hind leg, 42.5, 41; hind foot, 21, 19.5; width of head, 11.5, 11.5; femoral pores, about 11 (perforated scales).

In three immature specimens (about 52–71 mm.), representing both sexes, the paired dorso-lateral blotches are slightly evident, each being bordered posteriorly by an oblique row of tiny white spots. This pattern probably represents an ancestral type of coloration; it is as fully pronounced in the immature insular specimens as in mainland specimens of equal age. In fact, young representatives of the two subspecies are not readily distinguishable, unless perhaps by the slightly larger average size of the insular form.

The average length of adults of *stonei*, of both sexes, exceeds that of mainland adults by more than ten per cent. In his monograph of the genus, Schmidt (1922, p. 714) refers to an unspecified number of specimens of *H. propinqua* from Padre Island, but gives no hint of their distinctness from the mainland form. His maximum measurement of length (140 mm.) applies, I suspect, to a Padre Island specimen.

The difference in coloration between adult males of the two subspecies was striking enough to be appreciated at once in the field.

The subspecific name is bestowed as a mark of esteem for Dr. Witmer Stone, of the Academy of Natural Sciences of Philadelphia, whose contributions have added much to our knowledge of the vertebrate fauna of Texas.

Specimens examined.—Padre Island, Texas, 9 males, 4 females.

***Holbrookia propinqua propinqua* Baird and Girard.**

SOUTHERN TEXAS HOLBROOKIA.

Although Schmidt (1922, p. 714) considers this species satisfactorily defined by Cope (1900, p. 289), the latter's color description is not as detailed as might be desired, and his measurements are only comparative. The following notes are based upon alcoholic specimens, primarily those

from Flour Bluff, since others from Sarita and Norias happened to be discolored in the preserving fluid used in the field. (The stomachs of birds that have been feeding on the purple fruit of *Opuntia* should not be placed in the same container with herpetological specimens.)

Four adult males: top of head more or less completely mummy brown; dorsal ground color varying from olive-gray to dark olive-gray; about 10 pairs of deep mouse gray dorso-lateral blotches, extending from nape to basal part of tail (almost wanting in one specimen); numerous white spots above as in *H. p. stonei*, but maximum diameter only about .6 mm., and scarcely evident on femur; upper side of limbs (especially hind limbs) with faint dark bars; two oblique black bars on each side, 4–4.5 mm. in length and 1 mm. in maximum width; lower jaws, throat, and upper breast faintly or heavily marked with deep gull gray; rest of under parts white.

One adult female: upper parts glaucous-gray; a faint trace of bars on upper side of hind limbs; no trace of oblique lateral bars; lower sides washed with reddish (noted in several fresh specimens, and still somewhat evident in preserved specimens); under parts white.

Several immature specimens (54.5–59 mm.) of both sexes show no sexual color differences. Except for slightly smaller average size, they are practically indistinguishable from immature specimens of *stonei*. As in immature specimens of that form, there are faint indications of paired dorso-lateral blotches, with accompanying oblique rows of white spots.

Since the measurements given by Schmidt (1922, table) obviously pertain in part to *H. p. stonei*, the following measurements of specimens of *H. p. propinqua* from Flour Bluff, Sarita, and Norias are supplied. Five adult males: total length, 102–121 (110.8); snout to vent, 42–47 (45.3); tail, 60–75 (65.5); hind leg, 36–40.5 (38.5); hind foot, 17.5–19.5 (18.6); width of head, 8.5–9.5 (8.7); femoral pores, 14–17 (15.4). Three adult females: total length, 102.5–115 (107.2); snout to vent, 48–51 (49.2); tail, 54.5–64 (58); hind leg, 34–38.5 (36.7); hind foot, 17–18 (17.3); width of head, 9–9.5 (9.3); femoral pores, 11–16 (14.2).

Specimens examined (all from Texas).—Flour Bluff, Corpus Christi Bay, 8 males, 4 females; Sarita (Kenedy County), 2 males, 2 females; Norias (Kenedy County), 2 males.

LITERATURE CITED.

COPE, E. D.

1900. The crocodilians, lizards, and snakes of North America. Ann. Rept. Smithsonian Institution 1898, pp. 151–1294, 36 pl., 347 fig.

SCHMIDT, K. P.

1922. A review of the North American genus of lizards *Holbrookia*. Bull. Am. Mus. Nat. Hist., vol. 46, art. 12, pp. 709–725, 3 pl., 5 fig.



Harper, F. 1932. "A new Texas subspecies of the lizard genus *Holbrookia*." *Proceedings of the Biological Society of Washington* 45, 15–17.

View This Item Online: <https://www.biodiversitylibrary.org/item/109907>

Permalink: <https://www.biodiversitylibrary.org/partpdf/48798>

Holding Institution

Smithsonian Libraries

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Biological Society of Washington

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.