

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Animal Abstract

Element Code: ARACH01110Data Sensitivity: No**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE****NAME:** *Plestiodon skiltonianus***COMMON NAME:** Western Skink**SYNONYMS:** *Eumeces skiltonianus***FAMILY:** Squamata: Scincidae**AUTHOR, PUBLICATION:** Baird, Spencer F. and Charles Girard. 1852. Proceedings of the Academy of Natural Sciences of Philadelphia. v.6: p. 69.**TYPE LOCALITY:** Oregon. Restricted to "The Dalles" Smith and Taylor 1950.**TYPE SPECIMEN:** USNM 3172 (holotype). Rev. George Cleary. No date.**TAXONOMIC UNIQUENESS:** There are 13 species of *Plestiodon* recognized by NatureServe in the United States and Canada, and another 22 subspecies. Five species are found in Arizona: *P. callicephalus*, *P. gilberti*, *P. multivigatus*, *P. obsoletus*, and *P. skiltonianus*.**DESCRIPTION:** A small (up to 86 mm or 3.4" from snout to vent), shiny lizard with a thick tail, a stout body, and small limbs. The neck is thick and the head is small. Coloration is dark brown to reddish brown. A cream colored stripe runs down each side of the back extending from the snout, over the eye, and to the base of the tail. An additional stripe runs along each lower side extending from the lip to the base of the tail. The tail is dull gray or blue-gray. The chin and sides of the face are often tinted orange-red during breeding season. Young are darker, have more distinct stripes, and have a bright blue tail. The scales are large, rounded, smooth, and very shiny (Brennan 2016).

Stebbins 1966:123. Snout-vent length 2¼-3¼ inches. Four light stripes extend well onto tail. Broad brown band on back, between light stripes and on side between light stripes. Tail gray or brown; blue in juveniles. Breeding male has orange on sides of head, tip of tail.

AIDS TO IDENTIFICATION: The similar looking Many-lined Skink (*P. multivirgatus*) has more numerous and varied stripes and a much longer tail (when not regenerated).**ILLUSTRATIONS:**

Color drawing (Stebbins 1966: plate 24)

Color photo (Behler and King 1979: plates 421,441,442)

Color Photo (Brennan), <http://www.reptilesfaz.org/Lizards-Subpages/h-p-skiltonianus.html>.Color Photos, <http://www.californiaherps.com/identification/lizardsid/plestiodon.id.html>.Color Photos, <http://www.wildherps.com/species/E.skiltonianus.html>.

TOTAL RANGE: Southern British Columbia south to Baja California, including Santa Catalina, Los Coronados and Todos Santos Islands; Montana, Wyoming, Idaho, Nevada, Utah and NW Arizona.

RANGE WITHIN ARIZONA: NW Arizona (Arizona Strip, the portion of the State north of the Colorado River) on the Kaibab Plateau, Mount Logan and possibly other higher peaks, Coconino and Mohave Counties.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: This ground-dweller is active during the day but most activity occurs under surface cover. It is capable of casting off (and regenerating) the tail (Brennan 2016).

In British Columbia, Rutherford and Gregory (2003) found that 25 recaptures of tagged Western Skinks in the Creston Valley Wildlife Management Area had a mean of 8 m distance from the previous capture in the same year. This suggests that an average home range is small, roughly 0.01 ha (a circle with a 10 m diameter is 78 m² or approximately 0.01 ha). Rutherford and Gregory (2003) also reported a maximum movement of 61.4 m during a season suggesting some home ranges may be larger than 0.01 ha. Site fidelity was high over 3 years. These data suggest that dispersal capabilities are relatively low. This may mean that populations are physically and genetically isolated at both the site and landscape levels.

Also in British Columbia, in two surveyed sites of the same size near Creston, the average density of Western Skinks was approximately 17 Western Skinks per hectare (Rutherford and Gregory 2003). Vincer (2010, unpublished data) surveyed several sites near Vaseux Lake and found the average density of Western Skinks to be 7 Western Skink per hectare. Density estimates may vary in part due to detectability issues. Dulisse (2006a) found that detection probabilities of Western Skinks in the Kootenay Region were 0.2 to 0.25. Western Skink population densities are highly variable and dependent on local ecosystem features and therefore a mean number per hectare cannot be accurately applied across the landscape

REPRODUCTION: Eggs are laid in summer in a nest buried in moist soil. Clutch size ranges from 2 to 10 eggs. The female remains in the nest with the eggs to guard them (Brennan 2016). Some may breed at two years of age, but most will be three (Smith 1946).

FOOD HABITS: Insects, spiders, sowbugs, earthworms, caterpillars. Occasionally cannibalistic (Stebbins).

HABITAT: In Arizona, openings in forests of ponderosa pine and fir, under rocks and logs; also rocky streamside habitats under canopies of broadleaf deciduous trees.

ELEVATION: In Arizona, 5000 – 8500 feet (1525-2530m), according to Brennan 2016.

PLANT COMMUNITY: Great Basin Conifer Woodland, Petran Montane Conifer Forest, and Petran Subalpine Conifer Forest communities.

POPULATION TRENDS: Unknown for Arizona. There are only four occurrences and the species is ranked as critically imperiled in Arizona by NatureServe 2016. The extension of this skink into the State represents its extreme southeastern range. In several other states the species is ranked as secure or apparently secure, and an overall national rank as vulnerable. Nature Serve (2016) estimates that global short term trends will remain stable or a $\pm 10\%$ fluctuation in the population size, area of occupancy, range, and/or number of occurrences. The predicted long-term global trend is relatively stable or a $\pm 25\%$ fluctuation in the previous metrics.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None (AZGFD, ACWS 2022)
[1C (AGFD SWAP 2012)]
OTHER STATUS: None.

MANAGEMENT FACTORS: This species in Arizona is on the extreme southeastern edge of its range, with limited distribution.

Threats: Because the species is of Special Concern in British Columbia (the extreme northern extension of its range) a comprehensive management plan prepared in 2013 (B.C. Western Skink Working Group) included a threat assessment. The majority of threats (residential and commercial development, agriculture, energy production and mining and transportation and service corridors, and natural systems modifications) were considered low, biological resource use (e.g., collecting) was rated at negligible, and invasive species problems and climate change impacts were unknown.

The stated management goal in British Columbia is simply to maintain or increase the population of the Western Skink within its range. Although current population numbers are not known, it was felt that habitat protection at strategic sites might be sufficient to promote this goal successfully. Determining where these sites are, if there are any ongoing or pending negative impacts, and developing localized management plans that take into account land ownership were deemed to be appropriate actions. They also recommend a monitoring program (B.C. Western Skink Working Group 2013).

PROTECTIVE MEASURES TAKEN: None, but Arizona collection sites that occur within the Grand Canyon National Park and the BLM Mount Logan Wilderness have some protection.

SUGGESTED PROJECTS: Distribution, habitat, population and life history studies.

LAND MANAGEMENT/OWNERSHIP: USDI Bureau of Land Management, Arizona Strip Field Office, Mount Logan Wilderness Area; USDI National Park Service, Grand Canyon National Park; and USDA Forest Service, Kaibab National Forest.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

- Arizona Game and Fish Department. 2012. Arizona's State Wildlife Action Plan 2012-2022. Phoenix, AZ.
- Arizona Game and Fish Department. 2022. Arizona Wildlife Conservation Strategy: 2022-2032. Arizona Game and Fish Department, Phoenix, Arizona. 378 pages.
- Baird, Spencer F. and Charles Girard. 1852. Characteristics of some new reptiles in the Museum of the Smithsonian Institution. Proceedings of the Academy of Natural Sciences of Philadelphia. v.6: p. 69.
- B.C. Western Skink Working Group. 2013. Management Plan for the Western Skink (*Plestiodon skiltonianus*; formerly *Eumeces skiltonianus*) in British Columbia. Prepared for the B.C. Ministry of Environment, Victoria, BC. 28 pages.
- Behler, J.L. and F.W. King. 1979. American West. Alfred A. Knopf, New York. pp.576-577.
- Brennan, T.C. In: <http://www.reptilesfaz.org/Lizards-Subpages/h-p-skiltonianus.html>, accessed 7/27/2016.
- Dulisse, J. 2006a. 2006 Columbia Basin western skink inventory. Report prepared for Columbia Basin Fish & Wildlife Compensation Program, Nelson, BC.
- Environment Canada. 2014. Management Plan for the Western Skink (*Plestiodon skiltonianus*) in Canada [Proposed]. Species at Risk Act Management Plan Series. Environment Canada, Ottawa. iv p. + Annex.
- Lowe, C.H. 1964. Amphibians and reptiles. The vertebrates of Arizona. University of Arizona Press, Tucson P.165.
- NatureServe Explorer, accessed 7/27/2016, <https://explorer.natureserve.org/>
- Rutherford, P.L. and P.T. Gregory. 2003. Habitat use and movement patterns of northern alligator lizards (*Elgaria coerulea*) and western skinks (*Eumeces skiltonianus*) in southeastern British Columbia. J. Herpetol. 37(1):98-106.
- Smith, H.M. 1946. Handbook of lizards. Lizards of the United States and Canada. Comstock Publishing Company. Ithaca, New York. Pp.380-384.
- Stebbins, R.C. 1954. Amphibians and reptiles of western North America. McGraw-Hill Book Company, Inc., New York. Pp.279-283.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

T.R. Van Devender, Arizona Sonoran Desert Museum, Tucson.

ADDITIONAL INFORMATION:

Named after American naturalist Dr. Avery J. Skelton, who sent specimens to Baird and Girard. When threatened by a predator, skinks usually try to draw attention to their tail. If the predator attacks the tail, the tail will come off and the lizards escape unharmed. The tail will grow back with time.

Revised: 1991-03-22 (????)
2016-07-27 (BDT)
2023-05-03 (MBL)

To the user of this abstract: you may use the entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 19XX (= **year of last revision as indicated at end of abstract**). X...X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp