

Catalogue of American Amphibians and Reptiles.

BRODIE, EDMUND D., JR. 1971. *Plethodon stormi*.

***Plethodon stormi* Highton and Brame**
Siskiyou Mountains salamander

Plethodon stormi Highton and Brame 1965. Type-locality, 1.25 miles south of Copper, Jackson County, Oregon. Holotype, U. S. Natl. Mus. 149964, collected by James Riggs, 11 May 1963.

• CONTENT. No subspecies have been described.

• DEFINITION AND DIAGNOSIS. A short-limbed, long-bodied *Plethodon* closely related to *P. elongatus* with a modal number of 17 costal grooves (18 trunk vertebrae), an olive-tan dorsal stripe in juveniles and usually 4 to 5.5 costal folds between adpressed limbs in adults. The ground color and venter are black in small juveniles but lighter in adults. In adults the ground color is light purplish-brown and the venter is lavender or light purplish-gray. The gular region is cream-colored. The olive-tan dorsal stripe is even-edged and usually extends to midway on the tail. In adults the dorsal stripe appears light brown due to a light uniform covering of melanophores. Coppery iridophores are present beneath the stripe pigment and may cause the stripe to appear orange or pink. Iridophore flecking is very heavy on the head, sides, and limbs and is medium to heavy on the dorsal stripe and gular area. Iridophores are absent or very sparse along the midventral line. Rarely, individuals of *P. stormi* have a few gold iridophores on the eye above the pupil.

Costal grooves number 16 to 18, and vomerine teeth usually number 8 to 18 (upper limit 25) in adults. The smallest specimen examined was 21 mm in snout-vent length and the largest specimen examined was 76 mm in snout-vent length.

Sexual maturity is reached at a snout-vent length of about 55 mm. Sexual dimorphism is present in the number of maxillary plus premaxillary teeth (males averaged 47.4, females averaged 53.9). Males also have mental glands and sometimes have poorly developed vent lobes.

Plethodon stormi is distinguished from *P. elongatus* (the only adjacent congeneric salamander) by the following characteristics of *P. elongatus*: Modal number of 18 costal grooves, reddish dorsal stripe, shorter legs (usually 6.5 to 7.5 grooves between adpressed limbs), iridophore flecking on the back absent or very sparse, fewer teeth, and a narrower, longer head.

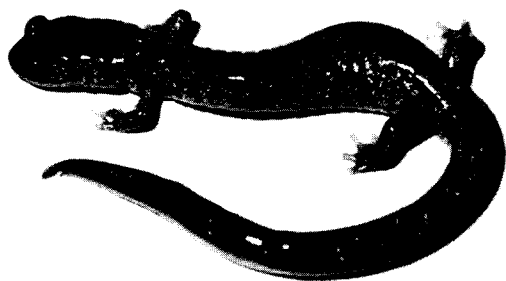


FIGURE. *Plethodon stormi*. Photograph of an adult individual from Hutton Guard Station, Siskiyou County, California (Photo, E. D. Brodie).

• DESCRIPTIONS. *Plethodon stormi* was described by Brodie (1969, 1970), Highton and Brame (1965), and Stebbins (1966); those by Brodie are the most complete. Brodie (1968) described the mental gland.

• ILLUSTRATIONS. Stebbins (1966) provided a color drawing and Brodie (1968) illustrated the mental gland. A photograph of an adult is included in this account.

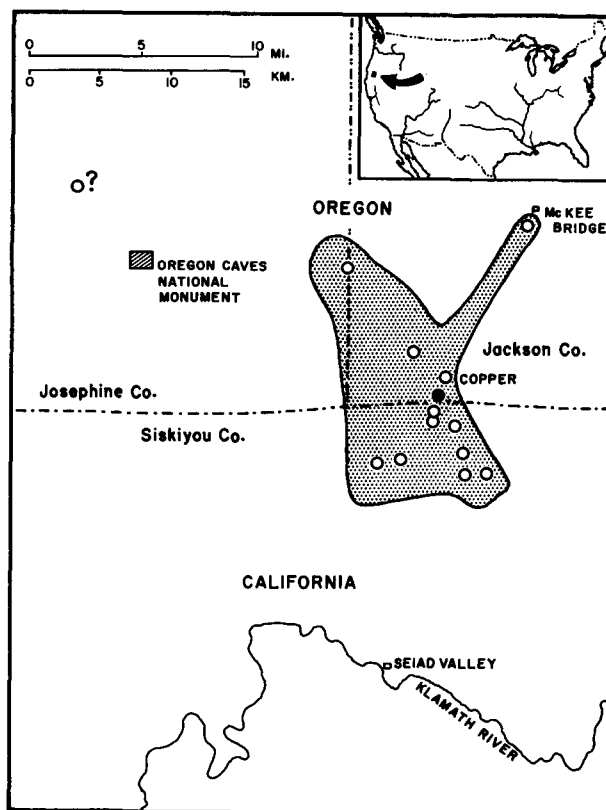
• DISTRIBUTION. *Plethodon stormi* occurs in Jackson County, Oregon, and northern Siskiyou County, California. It is not sympatric with any other *Plethodon* but is found within 9 miles of *P. elongatus*. *P. stormi* was reported from near the Oregon Caves, which would make it sympatric with *P. elongatus*, but this record is questionable (Brodie, 1970).

• FOSSIL RECORD. None.

• PERTINENT LITERATURE. Brodie (1970) discussed distribution and geographic variation. Storm (1966) and Wake (1966) mentioned *P. stormi*. Highton and Brame (1965) provided information on hemoglobins and plasma proteins of *stormi* and *elongatus* in the original description of *stormi*. The papers cited in this account are thought to represent all the scientifically pertinent literature on this species.

• ETYMOLOGY. This species was named in honor of Robert M. Storm, Professor of Zoology at Oregon State University, who directed the field trip that turned up the first specimens.

• COMMENT. *Plethodon stormi* is most closely related to *P. elongatus*, but it appears from examination of all known specimens that the two forms do not intergrade, and should thus be recognized as full species. The paratype series of *P. stormi* is closest morphologically and most removed geographically from *P. elongatus*.



MAP. The solid spot marks the type-locality. Open circles mark other localities.

P. stormi is found in loose rock rubble at the base of talus slopes or under surface objects. Almost all specimens are taken on north-facing slopes or in heavily shaded areas. It lives in the most xeric region of any western *Plethodon* and is active above ground only during the spring and fall rains.

LITERATURE CITED

- Brodie, Edmund D., Jr. 1968. Observations on the mental hedonic gland-clusters of western salamanders of the genus *Plethodon*. *Herpetologica* 24 (3):248-250.
- . 1969. Geographic variation and systematics of the western *Plethodon*. Ph.D. thesis submitted to Oregon State University, Corvallis, Oregon.
- . 1970. Western salamanders of the genus *Plethodon*: systematics and geographic variation. *Herpetologica* 26 (4): 468-516.
- Highton, Richard and Arden H. Brame, Jr. 1965. *Plethodon stormi* species nov. *Amphibia: Urodela: Plethodontidae*. Pilot Register of Zoology, Card No. 20.
- Stebbins, Robert C. 1966. A field guide to western amphibians and reptiles. Houghton Mifflin, Boston. xiv + 279 p.
- Storm, Robert M. 1966. Endangered plants and animals of Oregon II. Amphibians and reptiles. Agricultural Experiment Station Special Report 206. Oregon State University, Corvallis, Oregon. 12 p.
- Wake, David B. 1966. Comparative osteology and evolution of the lungless salamanders, family Plethodontidae. Mem. Southern California. Acad. Sci. (4):1-111.
- E. D. BRODIE, JR., CLEMSON UNIVERSITY, CLEMSON, SOUTH CAROLINA 29631.
- Primary editor for this account, James D. Anderson.
- Published 7 December 1971 by the SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES. Accounts 1-100 (1963-1970) were published by the American Society of Ichthyologists and Herpetologists, aided by a grant (G24231) from the National Science Foundation. Copyright © 1971 by the Society for the Study of Amphibians and Reptiles.

For information, write: SSAR Catalogue Committee
 Genera of Reptiles Project
 Department of Herpetology
 American Museum of Natural History
 New York, N. Y. 10024 USA
