## **Catalogue of American Amphibians and Reptiles.**

SEVER, DAVID M. 1983. Eurycea junaluska.

## Eurycea junaluska Sever, Dundee and Sullivan Junaluska Salamander

- Eurycea junaluska Sever, Dundee and Sullivan, 1976:26. Typelocality, "on U.S. Route 129, 3.2-11.2 km SE Tapoco, Graham County, North Carolina." Male holotype, United States Nat. Mus. 198421, collected 12 September 1973, by Charles D. Sullivan (examined by author).
  - CONTENT. No subspecies have been described.

• DEFINITION. Metamorphosed individuals are 34-50 mm from snout to posterior margin of vent with maximum total length of about 100 mm. Tail relatively short (47.2-52.0% of total length) and limbs relatively long (0-1 costal grooves between toes of adpressed limbs). 14 costal grooves and 15 trunk vertebrae. Vomerine teeth 12-33 ( $\bar{x} = 20.6$ , N = 23). Simple testes. Mental and cloacal glands similar to E. bislineata. These glands, labial cirri and temporal musculature hypertrophy in sexually active males which also possess enlarged premaxillary teeth. Nondescript color pattern characterized by a brownish, mottled dorsum with dorsolateral stripes lacking or broken into a series of thin wavy lines. Venter lighter and lacks mottling. Larvae under laboratory conditions hatch at 7.1-8.7 mm SL. Metamorphosis occurs at 34-42 mm SL. Color pattern of larger larvae similar to adults except larvae have more mottling, especially on the sides of the body and tail.

• DESCRIPTIONS. External morphology: Sever et al. (1976), Behler and King (1979), Sever (1979), Martof et al. (1980). Skeletal anatomy: a few observations on the skull by Sweet (1977). Temporal musculature and mental gland: Sever (1979). Cloacal glands: Sever (1980). Habitat: Sever et al. (1976), Sever (1979, in press), Martof et al. (1980). Male reproductive cycle: Sever et al. (1976), Sever (1979). Female reproductive cycle: Bruce (1982), Sever (in press). Eggs and larvae: Bruce (1982), Sever (in press). There are no reports on characters that can distinguish newly hatched *E. junaluska* from larvae of sympatric *E. bislineata*. Larger larvae of *E. junaluska* are more melanistic and robust than *E. bislineata* (Bruce, 1982).

• ILLUSTRATIONS. Sever et al. (1976) give a line drawing of the holotype. Photographs of adults are shown by Behler and King (1979), Martof et al. (1980) and Sever (1979, in press). Sever (in press) shows a photograph of the larva.

• DISTRIBUTION. Currently known from the Cheoah River and its tributaries Santeetlah Creek and Tululah Creek in Graham County, North Carolina (Sever et al., 1976); from Fighting Creek in the Little River drainage of the Great Smoky Mountains in Sevier County, Tennessee (Sever, 1976, 1979); and from the Tellico River basin, 11-22.5 km SE of Tellico Plains, Monroe County, Tennessee (Sever, in press). Elevational range is 365-730 m. Sever (1976) examined specimens described as *E. b. bislineata* X cirrigera by King (1939) from various localities in Sevier and Blount Counties in the Great Smoky Mountains, Tennessee. Sever stated that these specimens, which were in poor condition, were probably *E. junaluska*. However, the only specimens reported from the Great Smokies since King's paper have come from Fighting Creek.

• FOSSIL RECORD. None.

• PERTINENT LITERATURE. The only published references are those cited above.

• REMARKS. Although metamorphosed *E. junaluska* have been found under rocks in and along streams, individuals are most easily collected from roads bordering these streams on rainy nights (Sever et al., 1976; Sever, in press).

Bruce (1982) reported finding four clutches of 30-49 eggs attached to rocks in Santeetlah Creek between 13-15 May. Some of these eggs hatched in the laboratory between 30 May-5 June. Bruce (1982) proposed a two or three year larval period for E.

junaluska at Santeetlah Creek. E. bislineata at Santeetlah Creek oviposits at the same time, and the larvae are similar in size to those of E. junaluska at hatching. However, sympatric E. bislineata have a one or two year larval period, and larvae metamorphose at a smaller size (24-33 mm SL) than those of E. junaluska (Bruce, 1982).

• ETYMOLOGY. Named after the Cherokee Indian chief Junaluska who was prominent in the history of the region of the typelocality.

## COMMENT

In the original description, E. junaluska was compared to samples assigned to E. bislineata (Sever et al., 1976). Subsequent work revealed that these samples of supposed E. bislineata may contain an undescribed species of Eurycea (Sever, 1979). This undescribed form is sympatric with E. junaluska and E. b. wilderae at Tululah Creek and Fighting Creek. Sever (1979) provides characters to distinguish E. junaluska from the other two forms, but more work needs to be done to clarify their relationships.

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MAP. Solid circle marks type-locality; open circles indicate other localities.

of the salamander Eurycea junaluska in Tennessee. J. Ten-

- of the salamander Eurycea junaluska in Tennessee. J. Ten-nessee Acad. Sci. —, Harold A. Dundee, and Charles D. Sullivan. 1976. A new Eurycea (Amphibia: Plethodontidae) from southwestern North Carolina. Herpetologica 32(1):26-29. Sweet, Samuel S. 1977. Natural metamorphosis in Eurycea neotenes, and the generic allocation of the Texas Eurycea (Amphibia: Plethodontidae). Herpetologica 33(3):364-375.
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