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***Plethodon ouachitae* Dunn and Heinze  
Rich Mountain salamander**

*Plethodon ouachitae* Dunn and Heinze, 1933:121. Type-locality, "Ouachita National Forest, on Rich Mt., Polk Co., Arkansas." Holotype, U. S. Natl. Mus. 92484, collected by Albert A. Heinze and Dorothy A. Boyer, 30 May 1933.

• CONTENT. No subspecies are recognized.

• DEFINITION. Adults range to 72 mm in snout-vent length. The costal grooves usually are 16. The dorsum is black with variable white spots, bronze frosting, and chestnut markings. The venter is black with a varying number of small white spots. The throat is light but the pectoral area is only rarely, if ever, so light as in *Plethodon caddoensis*. The sides have white pigment frequently forming a band.

• DESCRIPTIONS. Adults have been described by Dunn and Heinze (1933:121), Bishop (1943:269-272), Pope and Pope (1951:139-148), Blair (1957:47-48), and Blair and Lindsay (1965:334). Juveniles are virtually undescribed and Pope and Pope's (1951:145) statement that "no difference was noted between them and the adults" is misleading, inasmuch as chocolate color is lacking in juveniles of the Rich Mountain population studied by them. The eggs have not been described.

• ILLUSTRATIONS. All published illustrations are of specimens from Rich Mountain; the distinctive populations of Fourche, Winding Stair, and Kiamichi Mountains are unfigured. The type description of Dunn and Heinze (1933:121) has a dorsolateral view of an adult, as do the illustrations furnished by Bishop (1943:271) and Conant (1958:255); Conant's illustration is in color. Bishop (1943:271) also has a dorsal view of an adult.

• DISTRIBUTION. Blair and Lindsay (1965:332) found this endemic species of the Ouachita Mountains on Fourche, Irons Fork, Black Fork, Rich, Winding Stair, Buffalo, and the eastern half of Kiamichi Mountain in southwestern Arkansas (Polk and Scott counties), and in southeastern Oklahoma (Latimer and LeFlore counties). The only known locality not on a main mountain ridge is at Big Eagle Creek (1050 feet) on U. S. Highway 259 south of Kiamichi Mountain; other collecting stations range up to 2850 feet. All known localities are on Jackfork Sandstone.

After heavy rainfall this salamander usually is found under boulders or logs, or under loose bark or in the interior of rotten logs, in mesic hardwood situations on north or northeast slopes. Swamp and bog areas are avoided. Individuals have been found from March to November, but are difficult to collect in the summer, even during periods of heavy rainfall.

• FOSSIL RECORD. None.

• PERTINENT LITERATURE. This species, difficult to collect other than under optimal conditions, has been little mentioned in the literature. Pope and Pope (1951:129-152) gave a detailed analysis of a large collection from Rich Mountain Tower and discussed several puzzling specimens of uncertain provenance. Relationship to other species was discussed by Grobman (1944:277-278), Dowling (1956:179), Highton (1962:326-328), and Adler and Dennis (1962:9-10). Blair and Lindsay (1965:332-334) enlarged the known range and discussed geographic variation. Wake (1963:77-118) made a few references to skeletal features of *Plethodon ouachitae* in discussing the osteology of members of the genus *Aneides*, and (Wake, 1966) discussed general aspects of evolution and relationships based on osteology.

• REMARKS. Blair and Lindsay (1965:334) found the typical population (chestnut dorsal markings in most adults) on Rich, Black Fork, the west end of Fourche, and the extreme east end of Winding Stair mountains. A strikingly different population, with paired white dorsal spots, occupies the eastern three-fourths of Fourche Mountain and at least the adjacent part of Irons Fork Mountain; the Fourche Mountain and Rich Mountain populations intergrade. A population with greatly reduced dorsal chestnut coloration occupies most of Winding Stair Mountain and Buffalo Mountain to the west. It is not clear

at the present time whether there is an abrupt reduction in chestnut coloration westward of the east end of Winding Stair Mountain, or whether a clinal situation is involved. A population devoid of chestnut coloration occurs on the eastern half of Kiamichi Mountain and in at least one locality south of Kiamichi Mountain (Big Eagle Creek on U. S. Highway 270). Blair and Lindsay (1965:334) found hybridization with *Plethodon glutinosus* on Kiamichi Mountain south of Big Cedar, LeFlore County, Oklahoma.

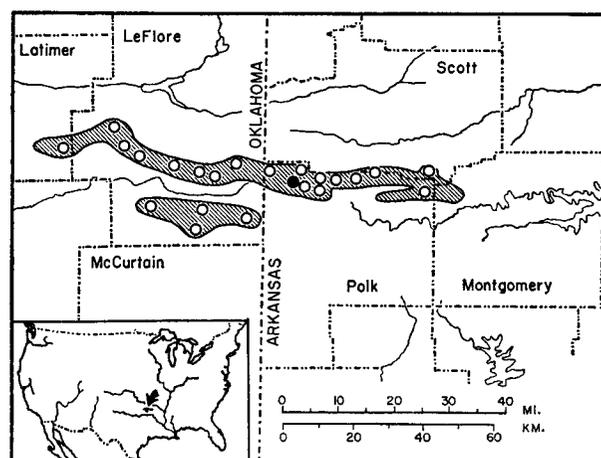
• ETYMOLOGY. The specific name *ouachitae* refers to the Ouachita Mountains (Ouachita is pronounced wash-i-taw).

COMMENT

The specimen reported by Dundee (1947:118) from east of Broken Bow, McCurtain County, Oklahoma, thought by Pope and Pope (1951:134) to represent an undescribed species, probably is *Plethodon glutinosus*.

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MAP. The solid symbol marks the type-locality; hollow symbols represent other known localities.

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