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## Distribution of the Southern Red-Backed Salamander, *Plethodon Serratus* (Caudata: Plethodontidae) in the Ouachita Mountain Region of Arkansas

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DISTRIBUTION OF THE SOUTHERN RED-BACKED SALAMANDER, *PLETHODON SERRATUS* (CAUDATA: PLETHODONTIDAE), IN THE OUACHITA MOUNTAIN REGION OF ARKANSAS

The southern red-backed salamander, *Plethodon serratus*, is a plethodontid salamander characterized by a high number of costal grooves (18-20), a long slender body, and a pronounced mental gland under the chin. This gland is prominent on the chins of sexually active males and is shelllike in contrast to the oval shaped gland of the zigzag salamander, *Plethodon dorsalis* (Behler and KING, The Audubon society field guide to North American reptiles and amphibians (A.A. Knopf, publisher), Chanticleer Press. p.347, 1987). *Plethodon serratus* is typically found under rocks, stones, logs and forest floor litter, in relatively mesic conditions, in the southeastern United States.

The *P. serratus* in Arkansas represent one of five disjunct populations for the species (Conant and Collins, A field guide to reptiles and amphibians of eastern and central North America, Moughton Mifflin. 450 pp., 1991) and is distinguished from *P. dorsalis* by range, with the Arkansas River Valley separating the species. The known records probably represent the western most margin of their distribution. Although there are remaining gaps in the known range, we found *P. serratus* to be locally abundant and will eventually be shown to occur throughout the remainder of the Ouachita mountain region of Arkansas.

This study was undertaken to amass past and present distribution patterns in order to suggest a current distribution map (Fig. 1) for the species, in Arkansas. The distribution presented reveals a broad range that extends eastward from the Oklahoma-Arkansas state line to Garland county and from Logan county southward to Pike, Clark, and Howard counties.

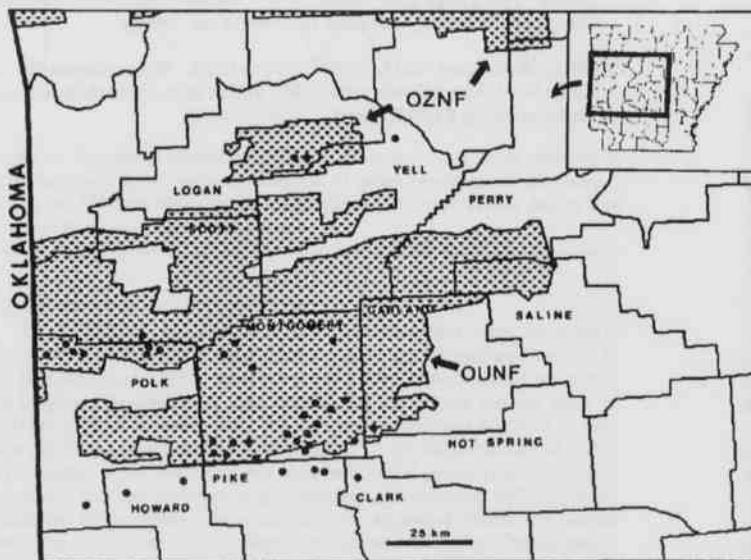


Figure 1. Known localities (solid circles) for *Plethodon serratus* in Arkansas. OZNF = Ozark National Forest; OUNF = Ouachita National Forest.

Distributional data were derived from *P. serratus* sampled during recent ground searches and road cruising activities. These were collated with historical distribution records taken from museums at Arkansas State University, Michigan State University, University of Oklahoma, Northwest State University of Louisiana, University of Arkansas at Monticello, Northeast Louisiana University, Louisiana State University at Shreveport, Southwest Missouri State, Mississippi State, Carnegie Museum, Milwaukee Public Museum, University of Missouri at Columbia and the U.S. National Museum of Natural History. Over 932 voucher specimens are included in this study 1951 to present.

*Plethodon serratus* has been documented from Logan, Yell, Polk, Montgomery, Garland, Howard, Pike, Clark and Scott counties. The Scott county location represents a new county record for *P. serratus* (Dowling, H.G. 1957. A review of the amphibians and reptiles of Arkansas. Occ. Pap. Univ. Arkansas Mus. 3:1-51). Perry, Saline and Hot Spring counties were sampled but have yet to reveal *P. serratus*. In summary, we conclude that *P. serratus* is locally abundant and widespread throughout the Ouachita Mountain region of Arkansas.

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