

## Distribution of the Queen Snake (Regina septemvittata) in Arkansas

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## **Executive Summary**

A field survey on the distribution of the Queen Snake (*Regina septemvittata*) was conducted in the Ozark Highlands ecoregion of northern Arkansas during the 2005 and 2006 activity seasons. A total of 20 historic and new localities was surveyed, including nine historic sites and 11 new sites. However, eight of the new sites occur in streams that also contain historic sites. Standard collecting techniques of rock-flipping and use of minnow traps were employed. Tissue samples were taken from all specimens.

A total of 17 snakes was found at four localities in two river systems (Illinois Bayou and Mulberry River) in Pope, Johnson, and Franklin counties. The greatest number of individuals (n = 12) were found in the Mulberry River. All of the snakes (n = 17) were either juveniles or recent neonates. Of the captured snakes (n = 16) the mean snout-vent length (SVL) was 28.3 cm (range, 19.0 - 45.8), and a mean total length (TL) was 36.3 cm (range, 24.4 - 57.9). The mean mass was 15.2 g (range, 3.8 - 48.5). Herpetofaunal ecological associates included 15 herpetofaunal species. These species included four snakes, two turtles, four lizards, three anurans, and two salamanders. Queen Snakes were recorded during the months of May, June, and October. Human activities were noted that could affect Queen Snake populations such as farming that could produce nutrient runoff and also recreation that could affect snakes directly by being crushed or indirectly by affecting the food source of Queen Snakes.