# Ambystoma mabeei Bishop (Caudata: Ambystomatidae): An Addition to the Salamander Fauna of Virginia

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ABSTRACT.—Ambystoma mabeei from Southampton County and Suffolk, Virginia extend the known range of the species 46 km (28.6 mi.) northward from North Carolina. Juveniles of this uncommon species are described for the first time. An updated distribution map is included.

Species with restricted ranges are of special interest to the biogeographer and ecologist. Their distributions, if accurately defined, may provide clues to their environmental tolerance limits. One such species is the salamander *Ambystoma mabeei*, known only from the Coastal Plain of North Carolina and South Carolina (Hardy and Anderson 1970). This note reports specimens from two additional localities that significantly extend the known range of this species northward. All specimens are in the collection of the National Museum of Natural History (USNM).

On 29 April 1979 an adult female A. mabeei (USNM 212212) and two recently metamorphosed juveniles (USNM 212213-14) were collected by Joseph C. Mitchell and Wendy H. Mitchell 7 km (4.3 mi.) northwest of Courtland, Southampton County, Virginia. On 17 May 1979 three other recently metamorphosed juveniles (USNM 212215-17) were collected at the same locality. On 16 June 1979 S. Blair Hedges found a juvenile (USNM 211210) 5 km (3.1 mi.) south of Suffolk, City of Suffolk (formerly Nansemond County), Virginia. These specimens represent the northernmost localities known and the first records of the species for Virginia. The previous northernmost site is 46 km (28.6 mi.) to the south in Perquimans County, North Carolina (Palmer et al. 1974). Figure 1 shows the updated range and all known localities of A. mabeei.

The adult female from Southampton County, Virginia has the following characteristics: snout-vent length (SVL; to posterior margin of vent) 54.3 mm; total length (TL) 93.1 mm; costal grooves 13R/13L. The dorsum in life was black with scattered white flecks (most concentrated

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Fig. 1. Locality records for *Ambystoma mabeei*. Triangles indicate new localities herein reported; circles indicate literature and museum records. The dashed line represents the Fall Line.

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laterally), and brown after preservation. The venter was slate gray with some white flecking on the chin. All juveniles from this locality possess gill buds, indicating recent transformation from the larval stage. The five specimens in the series measured (mm):SVL=36.7-46.0 ( $\bar{x}$ =42.0); TL=60.1-78.6 ( $\bar{x}$ =70.4). These individuals were uniform black dorsally with a single lateral row of flecking. Their ventral surfaces were uniform slate gray and their ventrolateral margins were marked with a row of white spots. The Suffolk specimen is an older juvenile (SVL=39.5 mm, TL=63.9 mm) with no gill buds; costal grooves 13/13; concentrated lateral flecking; and brown dorsum in preservative.

The Suffolk specimen was found under a pine log on the side of a sawdust pile. Here the surrounding vegetation consists mainly of Red Maple, *Acer rubrum*, with some Loblolly pine, *Pinus taeda*, and oaks, *Quercus* spp. The Southampton County locality is a cutover and burned pinewoods flatland with secondary growths of cane, *Arundinaria* spp., seedling Sweetgum, *Liquidambar styraciflua*, and Red Maple. Throughout this area are ditches and pools that contain varying amounts of water. All *Ambystoma mabeei* found at this locality were taken during the day under pieces of paper or small logs in sandy areas adjacent to water. Both localities are similar to *A. mabeei* habitats described by Hardy (1969).

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