

Catalogue of American Amphibians and Reptiles.

HIGHTON, RICHARD. 1986. *Plethodon hubrichti*.***Plethodon hubrichti* Thurow
Peaks of Otter salamander***Plethodon nettingi*: Thurow, 1955 (part).*Plethodon hubrichti* Thurow, 1957:59. Type-locality, "by the Blue Ridge Parkway at about 3100 feet, 0.9 miles south of cement milepost 80 and a sign reading 'View of Black Rock Hill,' in Bedford County near the Bedford-Botetourt line and roughly 10 miles ESE of Buchanan, Virginia." Holotype, National Museum of Natural History (USNM) 139087, an adult male collected on 9 December 1956 by Gordon R. Thurow (examined by author).*Plethodon richmondi hubrichti*: Highton, 1962:307.*Plethodon nettingi hubrichti*: Thurow, 1968:16.

● CONTENT. No subspecies are recognized.

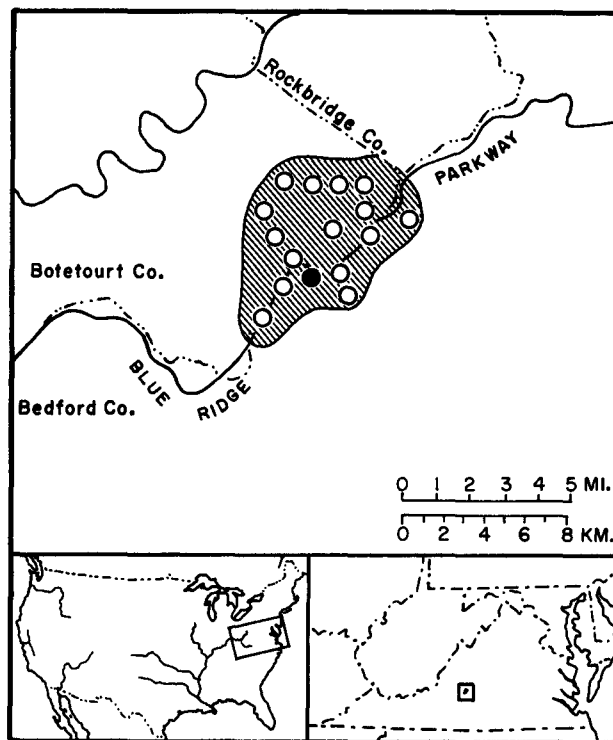
● DEFINITION. *Plethodon hubrichti* is a member of the *P. cinereus* group of eastern *Plethodon* as defined morphologically by Highton (1962) and biochemically by Highton and Larson (1979). It usually has 20 trunk vertebrae. Adults range from 40–58 mm (body) and 85–131 mm total length. The dorsum is dark brown with abundant brassy flecking and less common, larger, white spotting. There are white spots on the sides. The belly is dark brown and the chin has small white spots. There is no striped morph but young have scattered small red spots on the dorsum (Highton, 1962).

● DESCRIPTIONS. Thurow (1957, 1968), Highton (1962), Conant (1975), Behler and King (1979), and Martof et al. (1980) gave descriptions.

● ILLUSTRATIONS. A color photograph is in Martof et al. (1980) and a color drawing is in Smith (1978). Black and white photographs are in Mizuno and Macgregor (1974) and Bury et al. (1980). A scanning electron microscopic photograph of premaxillary teeth is in Coss (1974).

● DISTRIBUTION. *Plethodon hubrichti* is known only from the Blue Ridge Mountains of Bedford and Botetourt counties, Virginia, from the vicinity of Sunset Field south to 1 km north of the Peaks of Otter.

● FOSSIL RECORD. None.

● PERTINENT LITERATURE. Vertebral variation is given in Highton (1962). Highton (1971) provided information on distributional interactions of *P. hubrichti* and *P. cinereus*. Bury et al. (1980) discussed the species' conservation. Thurow (1968) studied morphometrics, pigmentation and relationships. Coss (1974) did a comparative scanning electron microscopic study of maxillary and premaxillary dentition. Dodd and Brodie (1976) described the shape of the male mental gland and compared it to other species of the genus. Highton and Larson (1979) compared electrophoretic variation in 29 genetic loci of *P. hubrichti* with that in all 25 other species of *Plethodon* recognized at that time. The albumin of *P. hubrichti* was compared immunologically to that of several other species of *Plethodon* by Maxson et al. (1979) and Maxson et al. (1984). The nucleolar organizer of oocytes was examined by Kezer and Macgregor (1973). DNA sequence homologies to cRNA of *P. cinereus* were studied using DNA/cRNA hybridization techniques by Macgregor et al. (1973). Chromosomal morphology, genome size and DNA sequence homologies to eastern and western species of *Plethodon* were studied by Mizuno and Macgregor (1974). Mizuno et al. (1976) compared middle repetitive DNA sequences with other species of *Plethodon*. Larson (1984) reviewed patterns of evolution in the salamander family Plethodontidae and made a number of comparisons of *P. hubrichti* to other species. He also estimated the time of divergence of *P. hubrichti* and *P. cinereus* based on a time-calibration of protein divergence. Brodie et al. (1974) studied immobility as a defense behavior and Brodie (1977) described anti-predator postures. Dodd et al. (1974) studied noxious skin secretions. Thurow (1976) studied aggressive behavior.● ETYMOLOGY. *P. hubrichti* is a patronym honoring the first person to collect the species, Leslie Hubricht.

Map. The solid circle shows the type locality. Open circles indicate other records.

COMMENT

Plethodon hubrichti was first reported as *P. nettingi* by Thurow (1955) and later described by Thurow (1957) as a full species. Highton (1962) recognized it as a subspecies of *P. richmondi* but Thurow (1968) and Highton (1971) regarded it as a subspecies of *P. nettingi*. It was again raised to full species status by Highton and Larson (1979) on the basis of biochemical genetic data.I thank the National Science Foundation for financial support of my research on *P. hubrichti* (Grant DEB-81-17983).

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