

American Museum Novitates 2445: 1-14.

Bousquet, Y., & A. Laroche. 1993. Catalogue of the Geadephaga (Coleoptera: Trachypachidae, Rhysodidae, Carabidae including Cicindelini) of America north of Mexico. *Memoirs of the Entomological Society of Canada* 167: 1-397.

Darlington, P. J. 1931. On some Carabidae, including new species, from the mountains of North Carolina and Tennessee. *Psyche* 42: 33-44.

Davidson, R. L. 1995. First Virginia records for ten species of Carabidae (Coleoptera). *Banisteria* 5: 16-19.

Shorter Contributions

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FIRST RECORD OF A SHREW OF THE GENUS *SOSEX* ON THE EASTERN SHORE OF VIRGINIA—Three species of long-tailed shrews (*Sorex cinereus*, *S. longirostris*, and *S. hoyi*) are documented from the Coastal Plain of Virginia and/or Maryland (Hall, 1981; Paradiso, 1969; Webster et al., 1985). However, the published distributions of these species have not included Accomack and Northampton counties, which comprise the Virginia portion of the Delmarva Peninsula, also known as the Eastern Shore of Virginia. Two other shrews (*Cryptotis parva* and *Blarina brevicauda*) occur throughout the Delmarva Peninsula, including the Virginia portion (Bailey, 1946; Handley & Patton, 1947; Hall, 1981; Webster et al., 1985). Two species of *Sorex* (*S. cinereus* and *S. fontinalis*) are reported from Delaware (Ken Reynolds, in litt.), and two (*S. cinereus* and *S. hoyi*) occur on the Eastern Shore of Maryland (Paradiso, 1969). Paradiso's (1969) accounts include one specimen of *S. cinereus* from Dorchester County, Maryland, which is near the middle portion of Maryland's Eastern Shore, as well as a specimen recovered from an owl pellet in Worcester County, Maryland, which is adjacent to Accomack County, Virginia.

As part of an investigation of mammal distributions on the Virginia barrier islands and adjacent Delmarva peninsula, we surveyed approximately 100 North American collections of Recent mammals for their holdings from Accomack and Northampton counties, Virginia. This survey revealed a skin-plus-skeleton specimen of *Sorex cinereus* collected 30 December 1950, at Locustville, Accomack County, Virginia by H. B. Quay. This specimen is housed at the Museum of Vertebrate Zoology, University of California at Berkeley, MVZ # 136676.

Examination of this specimen and comparison with representatives of *S. c. cinereus* (University of North Carolina, Wilmington # 1585, 4968) and *S. c. fontinalis*

(United States National Museum # 290876) confirm that it is referable to *S. c. fontinalis*. Copies of Quay's field notes are not available (C. Cicero, in litt.), therefore the exact location of capture and the type of habitat in which this specimen occurred are unknown. Paradiso (1969:18) describes the habitat of this subspecies as "mixed deciduous woods... [and] ...a dense tangle of sumac and honeysuckle bordering a marsh... [as well as] ...similar habitat along a small stream..."

This specimen confirms the historical occurrence of *S. c. fontinalis* in Virginia, and provides evidence that Handley (1982) lacked when he stated that "*S. c. fontinalis* is not known to occur in Virginia." Efforts to determine whether this taxon continues to exist in Accomack County are underway.

Acknowledgments

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Literature Cited

Bailey, J. W. 1946. *The Mammals of Virginia*. Williams Printing Company, Richmond, Virginia. 413 pp.

Handley, C. O., Jr. 1982. Deletion of *Sorex cinereus fontinalis* from taxa known to occur in Virginia. *Journal of Mammalogy* 63:319.

Handley, C. O., Jr., & C. P. Patton. 1947. *Wild Mammals of Virginia*. Commonwealth of Virginia, Commission of Game and Inland Fisheries, Richmond. 220 pp.

Hall, E. R. 1981. *The Mammals of North America*.

Volume I. John Wiley & Sons, New York. 600 pp. + 90.

Paradiso, J. L. 1969. Mammals of Maryland. North American Fauna 66:1-193.

Webster, W. D., J. F., Parnell, & W. C. Biggs, Jr. 1985. Mammals of the Carolinas, Virginia, and Maryland. University of North Carolina Press, Chapel Hill. 255 pp.

Appendix I Specimens Examined

Sorex cinereus cinereus. NORTH CAROLINA. Haywood Co. 1200 yards S Shining Rock (UNCW 1585); McDowell Co. 7 km N Old Fort, FR 482, 1950 ft. (UNCW 4968).

Sorex cinereus fontinalis. MARYLAND. Bethesda (USNM 290876). VIRGINIA. Accomack Co. Locustville (MVZ 136676).

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NEW MILLIPED RECORDS FOR VIRGINIA AND GEORGIA: *AMERACTIS SATIS* (ZOSTERACTINIDAE, JULIDA, DIPLOPODA) – *Ameractis satis* was described by Causey in 1959 from caves in White and Overton counties, Tennessee, as the type species of a monotypic genus. Hoffman (1964) reviewed the North American “nemasomatid” millipeds and found the gonopods of *A. satis* to be distinctive enough to warrant the naming of a new tribe in Nemasomatidae, Ameractini (*recte*: Ameractinini). Enghoff (1982), as part of a revision of the entire nemasomatoid complex, recognized further unusual features of the gonopods of *A. satis*. Like most Julida, a “sternal trough” in the posterior gonopods

accommodates the flagella of the anterior gonopods, but in *A. satis* conducts them back to unusual closed furrows on the anterior gonopod telopodites. Enghoff realized that these furrows were shared with *Zosteractis interminata* Loomis, described in 1943 from caves in Missouri, and was unique to these two genera. The family name Zosteractinidae Loomis 1943 was available, and Enghoff transferred *Ameractis* to it. Enghoff also described a new species, *Ameractis chirogona*, from an epigeal site in the Great Smoky Mountains National Park. Thus the family Zosteractinidae now consists of two genera and three species.

Enghoff (1982) published a spot map of the distribution of *A. satis*, showing it to occur in caves in White, Overton, Monroe, Decatur, and Roane counties in Tennessee, Marshall County in Alabama (as predicted by Hoffman, 1964) and Madison and McDowell counties in North Carolina. According to Hoffman (1964), T. C. Barr reported to him that the species was present in caves in Cumberland and Hamilton counties, Tennessee, as well. Because *A. satis* is a small, pale species of milliped it is easily overlooked and probably occurs in many other localities in the Cumberland Plateau in Tennessee, and may also be expected in Kentucky. The additional Alabama, North Carolina, Georgia and Virginia records given below make *A. satis* the most widely distributed species of troglobitic milliped in North America.

One might suspect that dispersal of this small, delicate, supposedly troglobitic milliped across the formidable barriers separating the Cumberland Plateau karsts from those of the Ridge and Valley Province would be highly unlikely, nor is there any obvious vicariance explanation for the distribution, at least at the species level (the two regions do share troglobitic genera, but no other species, of milliped). With this in mind we carefully compared our Virginia specimen (details below) with Enghoff's illustrations. While Enghoff's (and Hoffman's) drawings show the anterior gonopod telopodites of *A. satis* as featureless at their tips, under high magnification we detected in our specimen a small, acute projection and what appears to be a terminal vesicle or depression. These are clearly seen in exact detail in Enghoff's SEM pictures of the anterior gonopod telopodite tips. Such detailed correspondence would seem to support the hypothesis that the Virginia specimen is conspecific with Cumberland Plateau *Ameractis*.

The records from Roane, Hamilton, and Monroe counties, Tennessee, are in the Great Valley and in part of the Tennessee River drainage. This may provide the biogeographic connection at least with the easternmost Tennessee localities where *A. satis* has been found, and through the Holston River drainage with the Virginia record.

The northernmost record of *A. satis* in North Carolina