

A CHECKLIST OF PENNSYLVANIA SPHAERIIDAE

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Pennsylvania is one of our better collected and studied states in the field of malacology. With two well known centers, the Academy of Natural Sciences and Carnegie Museum at either end of the state, many noted malacologists have found occasion to collect and study in Pennsylvania. In addition to numerous professionals who have been associated with the state, there has been a small, but noteworthy, group of amateur collectors, particularly in the south-central and southeastern portions. Although there has never been a complete summary of the molluscan fauna of Pennsylvania, there have been basic summarizations prepared for every group except the Sphaeriidae. Ortmann (1919) has contributed his classic monograph of the naiads, Brooks (1931) has summarized and listed the land snails and more recently Parodiz (1958) has prepared a brief preliminary checklist of the freshwater snails of Pennsylvania. Although there have been several noteworthy sphaeriid collectors in Pennsylvania a summary of this family has not been possible on a practical basis until Herrington's (1962) revision of the group. His report has also made possible a number of recent state checklists.

This report is a preliminary one and is based mainly on material in the University of Michigan Museum of Zoology. The bulk of the Pennsylvania collections were obtained through exchange with Robert A. Heilman of Lebanon, Pennsylvania. His specimens in turn represent a compilation of pertinent material throughout

the state obtained through his own collections and through exchange with the Carnegie Museum. The bulk of the Carnegie material was collected by Arnold Ortmann and Victor Sterki.

This report will not attempt to summarize or utilize to any large degree the previous literature pertaining to Pennsylvania sphaeriids since most of this information has been rendered obsolete by Herrington's monograph. It will be found by reviewing our present information that a great deal more collecting is necessary before any basic distributional information of Pennsylvania sphaeriids is possible. It will be noted that even for *Sphaerium striatinum* the most common of Pennsylvania sphaeriids, records are present for less than half of the counties in the state.

Nine species of the genus *Sphaerium* and twelve species of the genus *Pisidium* have been found to date in Pennsylvania. This is a substantial portion of the 35 species recognized by Herrington in North America. Two species listed in this paper, *Pisidium obtusale* and *P. fallax*, have not been previously recorded from the state.

Acknowledgements

I wish to thank the Rev. H. B. Herrington, Robert A. Heilman, and Dr. William H. Heard who have all conveyed to me their interest and enthusiasm for Sphaeriidae. Dr. Henry van der Schalie has kindly allowed me to study material under his charge.

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SPHAERIUM FABALE Prime. Recorded from Pennsylvania by Herrington (1962) and in the Susquehanna and its tributaries in Lancaster County by Hartman and Michener (1874). I have not seen any examples from Pennsylvania.

SPHAERIUM LACUSTRE (Müller). Swamp, one half mile south of Pinegrove, Schuylkill County.

SPHAERIUM OCCIDENTALE Prime. Union City, Erie County.

SPHAERIUM PARTUMEIUM (Say). Swamp, one half mile south of Pinegrove, Schuylkill County.

SPHAERIUM RHOMBOIDEUM (Say). This species was recorded from Pennsylvania by Herrington (1962). There is one lot in the University of Michigan Museum of Zoology collection labeled Schuylkill River, Belmont, Wayne County, Pennsylvania, which is erroneous locality information. I have not seen any valid specimens from Pennsylvania.

SPHAERIUM SECURIS Prime. Swamp, one half mile south of Pinegrove, Schuylkill County.

SPHAERIUM STRIATINUM (Lamarck). Specimens are on hand from all the major drainage systems of the state, Ohio, Delaware, Susquehanna, and Lake Erie, and include fifty-seven localities in the following twenty-nine counties: Adams, Beaver, Berks, Bradford, Bucks, Butler, Cambria, Centre, Crawford, Dauphin, Erie, Franklin, Fulton, Greene, Indiana, Lancaster, Laurence, Lebanon, Mercer, Monroe, Perry, Philadelphia, Potter, Tioga, Warren, Washington, Wayne, Westmoreland, and York.

SPHAERIUM SULCATUM (Lamarck). The material studied is from the four major drainage areas and twenty-four localities in the following eighteen counties: Allegheny, Beaver, Berks, Chester, Crawford, Dauphin, Erie, Indiana, Lancaster, Laurence, Lebanon, Mercer, Northampton, Philadelphia, Potter, Tioga, Warren, and York.

SPHAERIUM TRANSVERSUM (Say). Two miles west of Manchester, York County. Roxbury District, Philadelphia. Swatara Creek, two miles north of Annville, Lebanon County. Juniata River at Amity Hall, Perry County.

PISIDIUM ADAMSII Prime. Bethlehem, Northampton County. Big Bend, Presque Isle near Erie, Erie County.

PISIDIUM AMNICUM (Müller). Recorded by Herrington (1962). I have not seen any examples from Pennsylvania.

PISIDIUM CASERTANUM (Poli). Found in all major drainage systems and thirty-one localities in the following 17 counties: Allegheny, Berks, Clarion, Columbia, Crawford, Dauphin, Delaware, Erie, Franklin, Lancaster, Lebanon, McKean, Monroe, Perry, Philadelphia, Schuylkill, and York.

PISIDIUM COMPRESSUM Prime. Has been found to date in the Lake Erie, Susquehanna and Delaware drainage systems. Specimens are recorded from fifteen localities in the following ten counties: Berks, Chester, Dauphin, Erie, Franklin, Lancaster, Lebanon, Northampton, Perry, and Philadelphia.

PISIDIUM DUBIUM (Say). Recorded from Lebanon County by Heilman and MacMillan (1958) and from Chester County by Hartman and Michener (1874). No specimens are on hand.

PISIDIUM FALLAX Sterki. Misery Bay, Presque Isle near Erie, Erie County. This species has not been previously recorded from Pennsylvania.

PISIDIUM NITIDUM Jenyns. Bethlehem, Northampton County. Presque Isle, Erie, Erie County.

PISIDIUM OBTUSALE Pfeiffer, form **VENTRICOSUM** Prime. Bethlehem, Northampton County. To the best of my knowledge the species has not been previously recorded from Pennsylvania.

PISIDIUM PUNCTIFERUM Guppy. Presque Isle near Erie, Erie County.

PISIDIUM VARIABLE Prime. Presque Isle near Erie, Erie County.

PISIDIUM WALKERII Sterki. Columbia, Lancaster County.

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The third number of MALACOLOGIA apparently completes volume 1. It was received in June and contains the following papers:

- R. POHLO - Ontogenetic changes of form and mode of life in *Tresus nuttalli* (Bivalvia: Mactridae). Page 321
- J. LEVER, J. C. JAGER, and A. WESTERVELD - A new anaesthetization technique for freshwater snails, tested on *Lymnaea stagnalis*. Page 331
- C. M. YAGER and H. W. HARRY - The uptake of radioactive Zinc, Cadmium and Copper by the freshwater snail, *Taphius glabratus*. Page 339
- H. W. HARRY - The anatomy of *Chilina fluctuosa* Gray reexamined, with prolegomena on the phylogeny of the higher limnic Basommatophora (Gastropoda: Pulmonata). Page 355
- J. B. BURCH - Cytological studies of Planorbidae (Gastropoda: Basommatophora). I. The African subgenus *Bulinus* s. s. Page 387
- J. B. BURCH, J. E. WILLIAMS, Y. HISHINUMA and R. NATARAJAN - Chromosomes of some Japanese freshwater snails (Basommatophora: Branchiopulmonata). Page 403

L. HUBRICHT - The bidentate species of *Ventridens* (Stylommatophora: Zonitidae). Page 417

- J. K. NEEL and W. R. ALLEN - The mussel fauna of the upper Cumberland Basin before its impoundment. Page 427.

MALACOLOGIA has maintained a high standard throughout, both in content and in form. The fact that a special number on Pleistocene Mollusca is planned for next year indicates that malacology is considered in its broadest sense - which is all to the good since students of Tertiary Mollusca cannot well get along without knowledge of living relatives of the forms they study from the shell alone. On the other hand, students of living Mollusca, interested even in a casual way in the zoogeography of the group, must have some knowledge of the occurrence of Tertiary forms.

The preparation of each number has involved a tremendous amount of work. In addition to the usual editorial chores, abstracts in 4 languages have been prepared and published. The editorial board and the editors are to be congratulated on a fine job well done and which we sincerely hope will be continued.

A. L.