

## **Introduction to a Special Section: American Shad and River Herring**

Authors: Limburg, Karin E., Richkus, William A., and Miller, Larry M.

Source: Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science, 4(1) : 173

Published By: American Fisheries Society

URL: <https://doi.org/10.1080/19425120.2012.676959>

---

BioOne Complete ([complete.BioOne.org](https://complete.BioOne.org)) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](https://www.bioone.org/terms-of-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

SPECIAL SECTION: AMERICAN SHAD AND RIVER HERRING

## Introduction to a Special Section: American Shad and River Herring

### Karin E. Limburg

State University of New York, College of Environmental Science and Forestry, 1 Forestry Drive, Syracuse, New York 13210, USA

### William A. Richkus

Versar, Inc., 9200 Rumsey Road, Columbia, Maryland 21045, USA

### Larry M. Miller

U.S. Fish and Wildlife Service, Allegheny National Fish Hatchery, 6616 Hemlock Road, Warren, Pennsylvania 16365, USA

The American shad *Alosa sapidissima* once ranked among the top two or three commercial fisheries in the United States and was rated among the choicest fish to eat (Blackford 1916). It was one of the first North American species to be artificially propagated (Clift 1872) and was introduced into numerous water bodies (see Hasselman et al. 2012 for a history of its transfer to West Coast waters). Similarly, its congeners, the alewife *A. pseudoharengus* and blueback herring *A. aestivalis* (together known as river herring), constituted important commercial and subsistence fisheries during the first several hundred years following the appearance of Europeans in North America. The early colonists marveled at the sheer abundance of these fish in American waters, especially the massive spawning migrations of anadromous herrings. Coastwide, American shad ran in the tens of millions and river herring probably numbered in the hundreds of millions or billions into the early nineteenth century. Over the next two centuries, the all too familiar threesome of overfishing, habitat loss, and pollution decimated populations (Limburg and Waldman 2009). Today, fisheries are closed in many states to allow stocks to rebuild, and river herring are listed as a species of concern under the U.S. Endangered Species Act (as of this writing, they are under consideration for listing as threatened).

There is renewed interest in these long marginalized fish, as managers and researchers begin to understand their ecological, cultural, and economic importance and advocate for ways to restore their abundance. This was evidenced at a 2-d symposium held at the 140th Annual Meeting of the American Fisheries

Society in Pittsburgh. Sufficient interest was generated to produce this special section of 16 articles. We thank our coeditors, namely, Kristin Miller, Anthony Overton, and John Waldman, as well as *Marine and Coastal Fisheries* editor-in-chief Donald Noakes and journals production coordinator Laura Hendee. We would also like to acknowledge the U.S. Fish and Wildlife Service, Northeast Region, Mid-Atlantic Fishery Resources Office, for its generous sponsorship of the publication.

We dedicate this special section to the memory of two special biologists: Joseph Loesch and John Olney. Both scientists at the Virginia Institute of Marine Sciences (VIMS), Joe passed away in June 2009 and John died an untimely death in January 2010. Both headed up VIMS's Anadromous Fish Program during their careers. Joe and John made fundamental contributions to the scientific understanding of blueback herring and American shad, respectively. We know they would be proud to see this collection of articles.

### REFERENCES

- Blackford, C. M. 1916. The shad: a national problem. *Transactions of the American Fisheries Society* 46:5–14.
- Clift, W. 1872. Shad culture. *Transactions of the American Fisheries Society* 1:21–28.
- Hasselman, D. J., R. A. Hinrichsen, B. A. Shields, and C. C. Ebbesmeyer. 2012. The rapid establishment, dispersal, and increased abundance of invasive American shad in the Pacific Northwest. *Fisheries* 37:103–114.
- Limburg, K. E., and J. R. Waldman. 2009. Dramatic declines in North Atlantic diadromous fishes. *BioScience* 59:955–965.