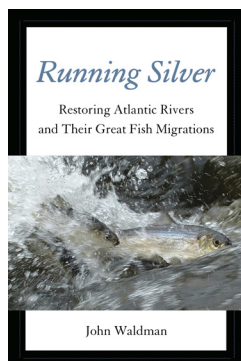


Making Way for Migratory Fish

Running Silver: Restoring Atlantic Rivers and Their Great Fish Migrations. John Waldman. Lyons Press, 2013. 284 pp., illus. \$26.95 (ISBN 9780762780594 cloth).

Migratory animals capture the imagination of the public and attract significant interest from the scientific community. Stories of magnificent journeys across vast distances have helped catapult many migratory animals to iconic status. Migrations are inherently challenging, but increasingly, animals must also deal with challenges imposed by humans. This is perhaps most evident for fish. Human infrastructure, such as dams, can completely block migration, impeding the ability of catadromous fish to reach inland rearing and feeding habitats and of anadromous fish to reach inland spawning habitats. Moreover, because fish migrations often occur along very specific corridors (e.g., rivers) and at precise times, it is rather easy for humans to capture migratory fish.



This story has played out across the developed world for decades and is increasingly playing out in the developing world. And it provides the backdrop for a fascinating book by John Waldman on the demise of

migratory fish populations from rivers in the northeastern United States and eastern Canada. Importantly, Waldman does not stop there; he uses the past to remind us of what we have lost and, in doing so, points where we need to go. He shares examples of success stories of migratory fish populations that were once decimated being returned, at least in part, to their historical glory. Many of the successes arise not from top-down government initiatives; rather, they depend on the passion, commitment, and dedication of numerous volunteers engaged in citizen science at its finest.

The book is important in that it paints a complete picture of the state of migratory fish in the US Northeast—past, present, and future. Much of what is covered in the book cannot be found in traditional peer-reviewed materials but needs to be brought together in one place, as Waldman has done here. I can only imagine the time (think years) that Waldman devoted to preparing the book, because the material needed to do so is not readily available. Indeed, in that sense, the book does serve as an important reference text for those working in the Northeast. The greatest strength of this work is that it emphasizes the connections among fish, rivers, and people. Natural resource professionals are well aware of these apparent connections, but Waldman does an exceptional job of showing how that interaction both contributed to the problem and is the basis for the remedy. There are plenty of “sky is falling” books to keep the environmentally inclined reader in a stupor, but this one sees its readers through to the other side. Nonetheless, Waldman does not provide false hope: He recognizes the limits of what humans can do to repair damaged rivers and the

importance of also trying to protect what is still intact.

I don't expect that this book will be particularly well cited, but I do expect that it will be well read and will make a lasting impact on those who indulge. *Running Silver* is best suited for educators (to provide them with captivating stories to share with others), students, and laypeople with an interest in fish or the environment. The book is written with care and, although it has not been through traditional peer review, has benefited from input from a variety of experts. Scientific terms and concepts (e.g., *shifting baselines*, *river continuum concept*) are introduced with the necessary context and description, such that there is no hint of jargon. Chapter titles such as “Diadromy 101” emphasize that elements of the book are clearly intended to be instructive, whereas other parts transition from historical narratives to stories to hands-on experiences of the author and his “interviewees.” Waldman spent much time on the front lines with natural resource professionals and passionate volunteers, learning firsthand about the value of the resource and the imperative for fixing it. Such extensive interaction with diverse members of the river science and conservation community produces both credibility and many of the book's engaging stories. For example, interactions with Alex Haro and Ted Castro-Santos yielded several pages of lucid synthesis in prose that most scientists only dream of. Although the fish of the Northeast are certainly the focus, Waldman makes connections to broader issues and topics, including Pacific salmon of the Northwest and dam construction on the Danube.

The text is peppered with interesting quotations (including some from

Henry David Thoreau—to whom Waldman dedicates the book—that still resonate today), which helps keep the book approachable. My rudimentary fact checking and evaluation of concepts suggests that the author certainly knows his stuff. I could see using this book to structure a senior

undergraduate course or graduate course in which one digs into various ecological concepts (e.g., connectivity, ecosystem services) and environmental issues (e.g., dams, fisheries, restoration). I now have some work to do as I weave some of the stories told here into my fish ecology and conservation course.

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