H-Net Reviews

Curtis J. Badger. A Natural History of Quiet Waters: Swamps and Wetlands of the Mid-Atlantic Coast. Charlottesville: University Press of Virginia, 2007. x + 143 pp. \$22.95, cloth, ISBN 978-0-8139-2618-6.

A Natural History of Quiet Waters



Reviewed by David J. Soll

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Commissioned by Justin M. Scott-Coe (Monte Vista Water District; Claremont Graduate University)

According to Curtis Badger, "A swamp is a landscape that can't decide what it wants to be" (p. 29). Perhaps that explains the appeal of bogs, swamps, and wetlands for Badger, whose *Quiet Waters* is guidebook, historical treatise, and environmental science text rolled into one. Those familiar with his previous works, such as *The Wild Coast: Exploring the Natural Attractions of the Mid-Atlantic* (2005), will recognize this blend of styles, but should be prepared for a heavier dose of science this time around.

Badger's interdisciplinary approach enables him to cover substantial ground in only 140 pages. He ranges widely in time, from the colonial era to the present, in an attempt to convey both the diminished scale of contemporary wetlands and recent efforts to restore areas that have been disturbed. However, he focuses primarily on his home waters of Virginia and Maryland. This is a sound decision because it enables Badger to draw on his network of contacts in government and conservation organizations. His first-hand accounts of wetland restoration efforts are some of the most interesting and illuminating passages of the book.

Restoration represents the latest and most promising chapter in America's long and tortured relationship with wetlands. Badger offers a fairly schematic account of prevailing attitudes about wetlands. He traces the long journey from fear and loathing of swamps in the colonial period, to the unwitting destruction that occurred in the nineteenth and early twentieth centuries, to more recent efforts to preserve, protect, and restore wetlands. Badger takes an extraordinarily charitable view of the inexorable decline of wetlands, contending that it stemmed primarily from ignorance: "Destruction of America's wetlands, for the most part, was not an act of willful desecration, but a practical solution to problems brought on by the growth and expansion of a young nation. We simply didn't know any better" (p. 26).

Readers of Ann Vileisis's magisterial *Discovering the Unknown Landscape* (1997) may find this argument unconvincing. Vileisis offers overwhelming evidence that for much of the twentieth century the federal government worked at cross purposes; some agencies actively worked to protect wetlands, while others promoted extensive drainage projects. For decades, wildlife interests fought a losing battle to protect wetlands from America's farmers. As cropland extended its reach, prairie potholes and coastal wetlands shrunk, greatly reducing critical habitat for a wide range of species.

Badger is on firmer ground when he turns to more recent developments. He questions the efficacy of America's reigning approach to wetland conservation, the no-net-loss policy, which requires developers to create new wetlands for each acre they destroy. No-net-loss fails to recognize that "these complex natural systems have evolved over thousands of years, and although you can design a landscape to replicate a wetland, there is no guarantee it will remain one ten, fifty, or one hundred years from now" (p. 34). Although Badger does not explicitly make the connection, it is difficult to avoid the conclusion that the overweening confidence in human ingenuity that led Americans to decimate hundreds of millions of acres of wetlands continues to guide our actions.

But Badger refuses to succumb to pessimism. Virginia's innovative program to pool resources to create wetlands provides some hope. Rather than rely on developers to build wetlands--a task for which they have little enthusiasm or expertise-the program requires developers to pay into a trust fund. Trust fund proceeds enable Virginia to hire nonprofits and firms with relevant expertise to construct wetlands. By consolidating payments from developers, this system allows for the construction and restoration of large parcels that are more likely to model natural wetlands than smaller, scattered plots.

Restoring former wetlands to something resembling their pre-disturbance condition holds more promise than building wetlands from scratch. Many employees of the Army Corps of Engineers spend their days ripping up drainage systems that their predecessors constructed. Although the scale of restoration is paltry relative to the enormous expanse of wetlands that once spread across most regions of the United States, rebuilding wetlands has a promising track record.

Badger's discussion of a wetland restoration project along Marshyhope Creek in Federalsburg, Maryland offers insight into both the destruction of wetlands and prospects for their renewal. In 1968 the town collaborated with the U.S. Soil Conservation Service to straighten and deepen the creek in an effort to reduce flooding. Workers dredged the Marshyhope and deposited the spoil from its bottom in the swamp forests and marshes that lined the creek. The project reduced flooding, but replaced vibrant wetlands with "sandy, grassy fields, little used by people or wildlife" (p. 38).

By the 1990s, attitudes about rivers and wetlands had changed. Town leaders sought to restore the banks of the Marshyhope and the surrounding wetlands to create a greenway that would attract both wildlife and human visitors. The Maryland National Guard spent two summers removing the fill that had been spread over the marshes. Then volunteers descended on the marshes to replant native species. By 2005, largemouth bass and a variety of native plant species, including wild rice, had returned to the creek and surrounding wetlands.

Badger does an excellent job putting the Marshyhope Creek restoration into perspective. He clearly conveys the enormous effort that went into the project and its success in reestablishing wetland processes, yet he is mindful of the question that looms over all restoration projects: restoration to what condition? Slipping into reportorial mode, Badger walks the creek with Kevin Smith, chief of restoration services for the Maryland Department of Natural Resources, and quotes Smith's assessment of the restoration: "It would be an overstatement to say that the impacts of channelization have been rectified by the restoration project. But I think we've alleviated some of the environmental costs, and that is what restoration is all about. We can't return to the days when Captain John Smith sailed up the Chesapeake, but we can work to reclaim some of those things that made the Chesapeake Bay region so wonderful in the first place" (p. 40).

You might be wondering: where is Federalsburg, Maryland? Badger situates it on the Eastern Shore of Maryland and dutifully describes the course of the Marshyhope. Unfortunately, Quiet Waters contains no maps or photos of the Marshyhope or anything else. The graceful cover photo of a Virginia salt marsh suggest more images to follow, but readers hoping to get a glimpse of the places Badger describes will have to look elsewhere. The University of Virginia Press would almost certainly argue that it is performing a valuable service by publishing Quiet Waters and other books unlikely to attract a commercial publisher. Nonetheless, the absence of photos is a notable omission in a book that lovingly describes a diverse array of wetlands.

On balance, however, *Quiet Waters* is a welcome addition to the field of natural history, and more specifically, to wetland scholarship. The book's flaws--its historical generalizations, lack of images, and tedious forays into dragonfly taxonomy--do not undermine its substantial strengths. These include clear explanations of wetland scientific processes and crystalline prose. Professors from both sides of campus will find much to admire in *Quiet Waters*.

Toward the end of the book, Badger recalls a passage from his seventh-grade history textbook that praised George Washington for clearing swamps and turning them into productive farmland: "Small wonder generations of twelve-yearolds grew up to be swamp-fearing, swamp-clearing adults," he concludes (p. 122). Although few middle school students are likely to curl up with *Quiet Waters*, it will appeal to adults who fondly recall endless summer days tromping around in swamps and creeks, and to those who make a living studying and restoring our remaining wetlands. If there is additional discussion of this review, you may access it through the network, at https://networks.h-net.org/h-water

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