

## ABOUT BOOKS

### Celebrating Biodiversity

Brooke Stevens

*A Bibliography of Biodiversity and Natural History in the Sudbury and Concord River Valley including the Great Meadows, Estabrook Woods, and Walden Woods.* 2002. Stephen F. Ells. Lincoln, MA. 36 pp. \$10.00. Available at the Concord Bookshop and Shop at Walden Pond. Both a downloadable version of this bibliography and an on-line version (as well as any updates) are available at

[http://www.walden.org/scholarship/e/ells\\_steve/biodiv\\_bib/index.html](http://www.walden.org/scholarship/e/ells_steve/biodiv_bib/index.html)



There are few stones left unturned in the intensively studied Sudbury and Concord River valley west of Boston, and it was during a bird conservation project in the Wayland to Carlisle region of the valley that Stephen Ells conceived the notion of a biodiversity bibliography for this important landscape. Dedicated to the six naturalists of the valley – William Brewster, Richard Eaton, Ludlow Griscom, Ernst Mayr, Allen Morgan, and Henry David Thoreau — Ells's extensive bibliography contains over 400 references (many helpfully annotated by the author) to writings over the last 170 years

about the wild animals and plants in the wetlands, the ponds, the river, and the nearby upland habitat of forest and field. . . . focus [ing] on data-rich studies, inventories, and articles about those species as they inhabited or migrated through this valley corridor. [Also included are] a few references about land use and human history to provide context; references about the great naturalists of the nineteenth century to give continuity; and references about pollution and invasive species to sound a warning.

There are separate sections on Estabrook Woods (Concord and Carlisle), Walden Woods and Walden Pond (Concord and Lincoln).

While the area covered is only about fourteen miles in length, it has provided a rich laboratory for a succession of naturalists, from dedicated amateurs to eminent scientists. Gathered here, their species- and site-specific information, their records and data, offer an invaluable record and resource for local conservation commissions, land trusts, sanctuaries, or for any student of biodiversity.

Although much altered and fragmented, the valley was designated in 2001 as Core Habitat for biodiversity protection in the state. "By happy chance," Ells notes, "one hundred seventy years of observation in the valley has been supplemented by sixty years of conservation activism. . . . Thus, much of the historic landscape has been preserved in a mosaic of twelve thousand acres of public and private stewardship. It is a triumph of protection at the edge of Boston."

### Sample entries (some abridged for inclusion here):

Alden, Peter. 1998. "World's first 1000+ species Biodiversity Day, Concord and Lincoln, Massachusetts, U.S.A. July 4, 1998 (1,904 species recorded)." Report. (Concord MA: 1998 and continuing annually or biannually.) Web-available at <[http://www.walden.org/scholarship/a/Alden\\_Peter](http://www.walden.org/scholarship/a/Alden_Peter)>.

Brewster, William. (In *American Naturalist*, *The Auk*, *Bird-Lore*, *Science*, with complete reference for each citation).

"The Mottled Owl again." Observation in Concord of plumage variation of Screech Owl. 1869

"A brood of young flickers (*Colaptes auratus*) and how they were fed." 1893

"Notes on the habits of the Northern Shrike (*Lanius borealis*)." Shrike captures and kills in Concord. 1894

"A remarkable flight of Pine Grosbeaks (*Pinicola enucleator*)." 1895

"A study of Lincoln's Sparrow." Observation at Concord during migration. 1899

"An ornithological mystery." Brewster describes an unknown call heard in the Sudbury-Concord River valley. Many exchanges about Yellow Rail. Uncertain outcome. 1905

"Aggressive Screech Owls." Note on attacks on passersby. 1907.

"The Otter in Eastern Massachusetts." Includes reports of rare otters in Fairhaven Bay and Walden Woods. 1909.

"Concerning the nuptial plumes worn by certain bitterns and the manner in which they are displayed." Previously unreported behavior observed at Great Meadows. 1911.

Clark, Frances H. 2000 *SuAsCo (Sudbury, Assabet and Concord River Watershed) Biodiversity Protection and Stewardship Plan*. Under the direction of the Massachusetts Riverways Program and the Mass. Executive Office of Environmental Affairs. 81 pp. with maps by William Giezentanner. Landmark regional analysis and proposal for citizen action. [Published at <http://www.sudburyvalleytrustees.org>]

Griscom, Lundlow 1949. *Birds of Concord*. (Cambridge: Harvard U. Press). 340 pp. Major work on the valley and its birds, and an evaluation of William Brewster.

Leonard, Michael C. 1982. "A description of the forest ecosystem and a forest management plan for the Minute Man National Historical Park." Report. Dec. 3, 1982. At MMNHP Resource Mgmt Off.

Lincoln, Mary S. 2001. [Mosses in Lincoln, Mass.]. TS. (List of 68 species, being updated, plus illustrated brochure.) At Lincoln conservation office.

Mayr, Ernst. 1992. "A local flora and the biological species concept." *American Journal of Botany*, 79: 222-238. . . . Mayr investigated whether the biological species concept applies to most plants. He surveyed the local flora in 27 square miles around

Concord, Massachusetts, and suggested that even plants largely conform to the biological species concept. At Boston PL.

Pierson, E. L. 1915. "A list of Odonata (Dragon Flies) collected at Concord, Massachusetts." *Proceedings of the Thoreau Museum of Natural History (Middlesex School)*, 1: 41.

Rosenfeld, Mary B. 1998. "The declining status of rare salamanders, rare turtles, and common turtles in Lincoln, MA. 1997. " Report sponsored by the Lincoln Land Conservation Trust. 304 pp. Report at Lincoln conservation office.

Rustigian, Heather. 1995. "Summer inventory of Lincoln's conservation fields." For Lincoln, Mass Land Conservation Trust and Lincoln Conservation Commission. MS in Lincoln conservation office.

[Stymeist, Robert; Richard A. Forster, Marjorie W. Rines, Simon A. Perkins, and others.] 1973 to date. "Bird Sightings." *Bird Observer*. . . . Earlier regular reports of sightings (some in the valley) include the series "Records of New England Birds," edited in the 1930s by David L. Garrison and others; and Ruth Emery's 40 years of records for Mass. Audubon.

Sudbury Valley Trustees. 2000. *Greenways Plan for the SuAsCo Watershed*. Wayland MA: Sudbury Valley Trustees.

US Environmental Protection Agency, Region One Office [Various reports on Nyanza Chemical Waste Dump, a National Priority List Superfund Site upstream in Ashland, MA, and its mercury pollution of the Sudbury and Concord Rivers.] See, Nyanza Superfund Fact Sheet at <<http://www.epa.gov/region1/superfund/sites/nyanza>>. Document repositories are at Ashland PL and US EPA Region One in Boston.

US Fish and Wildlife Service. Various surveys and studies relating to the Great Meadows National Wildlife Refuge . . . See <<http://www.fws.gov/r5fws/ma/grm.htm>> . . . including: Breeding birds, Anuran [certain amphibians], marshbirds, shorebird use, bluebird and wood duck box programs, West Nile Virus, various vegetation surveys and invasive species control studies for cattail, loosestrife, and water chestnut.

### Cover caption:

This startling cover shows the more than seventy fragments of conserved land in the Sudbury-Concord River valley, whether owned by the federal government, the state, towns, land trusts, or Harvard University. Permanent conservation and agricultural preservation restrictions are also shown. The map shows a fourteen-mile N-S part of the river from the Greenough Conservation Area near Route 4 in Carlisle at the top, to Heard Pond in Wayland at the bottom. Each bloc contains about ninety acres and is about 2000 feet on a side. Despite the obvious fragmentation, about 12,500 acres have been saved for wildlife (3,500 are within Great Meadows NWR.) The remainder is a mosaic of protection that has evolved over 130 years. Much of this area is Core Habitat on the Commonwealth's BIOMAP <<http://www.state.ma.us/dfwele/dfw/nhesp/nhbiomap.htm>> and will be in an international Important Bird Area. 