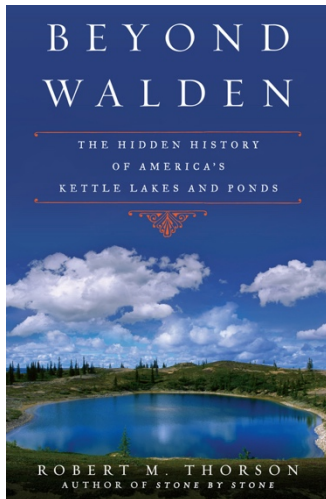


BEYOND WALDEN: THE HIDDEN HISTORY OF AMERICAN KETTLE LAKES AND PONDS

Robert M. Thorson, New York, Bloomsbury, 2009 (ISBN-13: 978-0-8027-1645-3). Contact: robert.thorson@uconn.edu. Website: www.kettle.com



Cover Image



Charles Whittlesey



Cape Cod Kettle

PURPOSE

To enhance the management of America's small glacial lakes through greater appreciation of the role they played in American history, pre-history, science, and literature.

REVIEWS

Kirkus Reviews, *April 2009*, "The author's enthusiasm shines through as he uses personal experience, literary references and the history of American popular culture...to illustrate this lively chronicle of a hitherto obscure environmental feature."

Boston Globe, *Michael Kenney*, "Thorson's account mixes hands-on geology, boyhood reminiscence, and a good dash of Thoreau."

Thoreau Society Bulletin, *J. Walter Brain*, "Thorson's words felicitously capture the essence of Emerson's and Thoreau's intellectual enterprise."

Bill McKibben, *Environmental Writer*, "delightful reading for anyone who heads 'to the lake' every summer...you will come away understanding your place in a new way."

Ken Wagner, *North American Lake Management Society* – "Required Reading for all lakefront property owners, other lake users, and those who manage our land and water resources...great reading, preferably by your favorite lake."

Gene Likens, *Cary Institute of Ecosystem Studies*, "a delightful and thoughtful book...filled with interesting information for the casual observer and user of lakes, as well as for the serious scholar."

Jeffrey Cramer, *Thoreau Scholar and Editor*, "Beyond Walden...[is] presented with a touch of poetry and humor that flowers into its own set of truths about these remarkable glacial-formed lakes."

TEN IDEAS FROM THE BOOK:

Fossil Icebergs - Kettles are a special “species” of glacial lake. Borrowing a phrase from nature writer Robert Finch, they are fossil icebergs, depressions formed when a block of ice became stranded and partially buried with sand and gravel before melting. The special properties of these lakes derive from this origin.

Transcendentalism - Walden Pond, Massachusetts is the most famous kettle in the world. The chemical purity, surface stillness, hydrological self-reliance, and seasonal moodiness of its water (all characteristic of kettles) contributed importantly to the development of transcendentalist thinking, particularly with respect to light and air. Quoting Thoreau: “Heaven is under our feet a well as over our heads.”

Blue Galaxy – Practically every lake lying north of the outermost glacial limit, but south of the hard-rocks of the Canadian Shield, the Adirondacks, and northern New England, is a kettle lake. They form a galaxy of about 100,000 blue dots extending from the foggy moorlands of Nantucket Island, Massachusetts to the parched prairie of Great Falls, Montana.

American History - The band of kettle lakes played an important supporting role in American history. Beginning with the search for potable water by the Pilgrims, and ending with the rise of a 20th century family lake culture, they were also sources of beaver pelts, marsh hay, fish and game, bog iron, refrigeration ice, pottery clay, cranberries, and medicinal herbs.

Mississippi Exploration - In a story of international significance, the chaotic nature of the kettle-pocked ice-stagnation terrain of northern Minnesota helped delay discovery of the source of the Mississippi River until 1832, more than a quarter century after the Lewis and Clark expedition. Three government-sponsored expeditions with military escorts failed before an Ojibwe guide named Ozawindib brought geologist Henry Rowe Schoolcraft to its source.

History of Science - Kettles played a critical background role in the emergence of American science because their bio-geo-chemical isolation made them ideal natural laboratories for ecology, limnology, and hydrology. Their fossil records, ranging from butchered mastodons to microscopic pollen, constitute the most important archive for the prehistory and paleoclimatology of the northeastern United States and Ontario.

Walden to Wobegon. Walden Pond is the literary progenitor of Lake Wobegon. Thoreau visited Minnesota kettles in 1861 on his only trip beyond the northeast. This east-west connection, largely buried by subsequent immigration from northern Europe (especially Scandinavia), was captured in Garrison Keillor's creation myth, *Lake Wobegon Days* (1985).

Deep Green Well – Thoreau called Walden a “deep green well.” John Muir said its waters “ooze through beds of drift.” Indeed, kettles are often fed either directly by rainfall or by groundwater seeping through silica-rich sand.

Family Lake Culture – Inland from the shores of the Great Lakes, practically every lake in the northern heartland states is a kettle. There, the recreational development of small lakes in the deep woods near the edge of the prairie led to the emergence of a distinctive regional subculture dominated by winter dreams of summer pastoral retreats.

Threatening Megatrends – Climate change, overdevelopment, and a diminished interest in lakes on the part of children are threatening the future of small lakes. Government programs have met with limited success because these lakes are political Lilliputians compared to oceanic shores, the Great Lakes, streams, rivers, and wetlands.

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Selected Quotes. One from each chapter. Page numbers in brackets.

INTRODUCTION

America's most famous kettle is Walden Pond, in Concord, Massachusetts. Thoreau's *Walden*, published in 1854, gave rise to a uniquely American way of thinking about nature that erupted a century later into a political movement called environmentalism. ... Walden has become an "international shrine." [4]

1 - ICE SHEET INVASION

Rinsing the [glacially crushed] residue was the final step in the production of kettle lake sand...The zone dominated by deposition of sand would play the most important role in creating kettle lakes and ponds across most of the glaciated fringe. [24-25]

2 - THE BIRTH OF KETTLE LAKES AND PONDS

The vast majority of Laurentide kettles... were created when slabs of ice became stranded during retreat, like stragglers falling behind a crowd, and were then buried or surrounded by the steady wash of sediments being sluiced down from the north. The result was a cluster of isolated lakes with jagged shorelines below a fairly smooth sand terrace... [31-32]

3 - EXTINCTION, EARLY HUMANS, AND STABILIZATION

After the late-glacial transition, lakes and ponds in every sector found their own appropriate level of biological activity, buffered by their surrounding wetlands and the thickening layer of detritus on the lake bottom...For the remainder of postglacial time, there would be no abrupt regional-scale transitions.... [60]

4 - NATIVES AND THE LAKE-FOREST ECOSYSTEM

Henry Rowe Schoolcraft's ethnography of the Ojibwe provides the best and most broadly applicable set of observations about native subsistence within the heartland during the Contact period... Schoolcraft supported the "creature of the forest" animal model for their human ecology, albeit with a heavy dose of cultural arrogance. [73]

5 - THE FUR TRADE, THE NORTHWEST PASSAGE, AND THE SOURCE OF THE MISSISSIPPI

To reach the headwaters of large regional rivers --the Manistee, Au Sable, and Muskegon rivers in Michigan; the St. Croix, Chippewa, and Wisconsin rivers in Wisconsin; and the St. Louis, Minnesota, and Red Rivers in Minnesota-- required navigating through a maze of kettle lakes, marshes, and winding streams within ice stagnation terrain. [95]

6 - KETTLES AND EARLY AMERICA

Ironically, Paul's animal companion, Babe the Blue Ox, was probably more authentic than he was. Everything about Babe's story --the gigantism, the geographic setting, and especially the

blue color -- is consistent with a fossil discovery from a northern kettle bog.... The chalky blue color of its carcass was due to a mineral named vivianite, an iron phosphate produced under fairly rare chemical conditions. [123-124]

7 - FAMILY LAKE CULTURE

The rise of an egalitarian, middle-class lake culture associated with midwestern kettles was captured by Sinclair Lewis in the background of his 1920 blockbuster novel *Main Street*, which was based on the authors own personal experience....Spending time at the lake cottage was less a vacation than an altered state of existence, and emotional bubble universe separate from the rest of the year. [132, 135]

8 - HOW LAKES WORK

Limnology, derived from the Greek *limne*, for "marsh," is the official name for lake science. Scientifically, it's the fusion of geology, zoology, botany, climatology, chemistry, physics, and mathematical modeling applied to freshwater environments....Henry David Thoreau was doing limnology at Walden Pond more than half a century before the first academic articles...The entire text of *Walden* is laced with lake observations. [149, 152]

9 - HABITATS, FLORA, AND FAUNA

Woodlands, meadow, lush herbs, rushes, lily pads, and open water -- each band of life gives way to another, from the driest, highest, and outermost reaches of the land to the center of each lake or pond. [168]

10 - LOVING LAKES TOO MUCH

The beautiful bay on Union Lake [Minnesota] that I used to fish in as a child --with its concentric canopy of trees, clutches of cattails, stands of rush, and sheets of lily pads--is now mostly a boulder-armored shore...The biologically rich lake of my memories is still scenic and cool to the touch on hot days, but it's eerily quiet, except for adult voices, boat noise, and dog barks.. [190]

11 - LAKE FUTURES

Modern lakes stand on the precipice between past and future. On the horizon are three potentially harmful megatrends coming at us like freight trains. [Overdevelopment of lake shorelines; Social, kids, technology; Climate change.] How we deal with them will determine the fate of America's kettle lakes.[204]