

BOOK REVIEWS



The Story of Vermont: A Natural and Cultural History

By Christopher McGrory Klyza and Stephen C. Trombulak (Hanover, N.H.: University Press of New England, 1999, pp. 252, paper, \$19.95).

Christopher Klyza and Stephen Trombulak have accomplished a formidable task in compiling a story that integrates all the critical contributions to the evolution of what we know today as Vermont. As with all such efforts to examine a complex web of interactions that have unfolded through time and space, they developed an impressive foundation in the natural sciences.

Part I, "Setting the Stage for Vermont," provides an integrated framework of influence between geology, topography, climate, and biology, all firmly supported with carefully constructed factual information including maps and tables. This section spans about a billion years of geologic history with an appropriate telescoping coverage of time as we approach the present. When the last ice sheet left Vermont, according to Klyza and Trombulak, it left behind an ecosystem fully refreshed with new unweathered sediments, ready to accept the influx of all the varied life forms that developed and eventually greeted the arriving native and European settlers.

Part II, "The Recent Landscape History of Vermont," systematically tracks the influence of evolving human society on the landscape. As Europeans replaced the native peoples, populations exploded, habitats disappeared, and an independent republic became a state. The ecological revolution wrought by capitalism up until the Civil War led to deforestation and near elimination of large wild mammals, as domestic stock expanded to peak numbers. External market forces initiated postwar changes such as the decline of the sheep industry and the expansion of dairy farming, which resulted in reforestation, conservation, and tourism, factors that continue to guide the development of Vermont today.

Part III, "Ecological Communities of Vermont," systematically examines the existing biological webs in Vermont's forest, open terrestrial, and wetland and aquatic settings, continuously drawing insight from the previously presented historical perspective. While apparently just telling Vermont's story, Klyza and Trombulak use their presentation of this wealth of factual information to teach basic ecological principles concerning topics such as global warming, surface ozone accumulation, acid rain, and carbon and nitrogen cycling.

The text is packed with information—every sentence is rich with knowledge. Readers will find themselves torn between wanting to race forward to find out more about the mutual influences on the evolution of Vermont's landscape, and wanting to read every word carefully as the authors build not just snapshot images, but vivid panoramas as conditions at various points in time come clear.

DAVID S. WESTERMAN

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Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont

By Elizabeth H. Thompson and Eric R. Sorenson, illustrated by Libby Davidson, Betsy Bringham, and Darien McElwain (Hanover, N.H.: The Nature Conservancy and the Vermont Department of Fish and Wildlife, distributed by University Press of New England, 2000, pp. xii, 456, paper, \$19.95).

Lewis Creek Lost and Found

By Kevin Dann (Hanover, N.H.: University Press of New England, 2001, pp. xvii, 221, \$45.00; paper, \$19.95).

These two books, both part of the Middlebury College Bicentennial Series in Environmental Studies, make a feast for the naturalist. Each offers new layers to our knowledge of the natural heritage of Vermont, using very different approaches.

When you stand in the woods, or at the edge of a river, what do you see around you? Why is one set of plants in a particular spot, and not another?

What do the assembled plants have in common? What can they teach us about the land? *Wetland, Woodland, Wildland* is written for landowners, hikers, foresters, naturalists, and anyone interested in knowing the wild landscape of our state. (The book does not cover either lakes and rivers or farmland, but concentrates on those places not completely under water and more or less wild—hence the title.) Written by ecologists Eric Sorenson of the state’s Natural Heritage and Nongame Wildlife Department and Elizabeth Thompson of The Nature Conservancy, *Wetland, Woodland, Wildland* represents an advance in the tools available for assessing our wild lands.

The first sections of the book introduce the state’s geology and climate, the eight biophysical regions, and the concept of the natural community, “an interacting assemblage of organisms, their physical environment, and the natural processes that affect them” (p. 58). The main text of the book is a guide to eighty natural communities, divided into upland and wetland, and further sorted by types, such as forested wetlands or open upland communities. These classifications have been developed by Nature Conservancy scientists and many others in and beyond Vermont. Each community is beautifully illustrated with drawings and photographs, and described in some detail: physical and ecological conditions, type of vegetation, animals, related communities, conservation and management, places to visit, references, and characteristic plants.

These can be useful in a number of ways. Some people will want to visit the examples of interesting communities near them, mostly on state lands. Some will map their own lands, or their town lands, and work to protect the most unusual and diverse places. Those interested in restoring a natural community that has been lost to cultivation, such as a riverine floodplain forest, can use the book to determine what plants were probably once there and would thrive there again, and which are invasives that need to be controlled.

There are only two maps in this book, both of the whole state: one a surficial geology map, the other of the biophysical regions. These are most helpful in giving an overview of the state and its regions. County or town boundaries would have helped, but maps big enough to be useful on the ground wouldn’t have fit in this book’s format anyway. It’s a small complaint. All in all, the authors and illustrators have done prodigious good work, and produced a valuable field guide to Vermont’s treasures.

The word “lost” in the title of Kevin Dann’s *Lewis Creek Lost and Found* refers to the imminent danger of losing, with endangered ecosystems and communities, our sense of place and our knowledge of history—including that of local heroes, extinct species, and marginal people. Dann interweaves the geography and natural history of this small

river with the histories of the people who dwelled along it, and the lives of three of the most prominent figures in its nineteenth-century history: Rowland Evans Robinson, Cyrus Guernsey Pringle, and John Bulkley Perry. The book uses their lives and explorations as occasions to describe the waterways of Lewis Creek and the lands it drains, its watershed.

Lewis Creek rises in the mountains of Starksboro, Bristol, and Monkton and flows swiftly downhill into Hinesburg, where the valley flattens out, and winds through Charlotte and Ferrisburgh before emptying into Lake Champlain. Dann's book follows the river upstream. As he says, it's easier to start at the mouth of a river than to choose one of the myriad tiny headwater streams. Lewis Creek is a small river now, though its bed shows that thousands of years ago it was once much larger, when the retreating glacier still covered the Winooski and what we now call the Huntington River flowed into Lewis Creek. The Abenaki called Lewis Creek "Sunganhetook," the Fishing River, and made yearly trips to its lower reaches to catch its abundant fish, including the Lake Champlain Atlantic salmon. We read that Rowland Robinson talked to a man who, with his two brothers, had caught the last known Lewis Creek salmon early in the nineteenth century. They had speared it with a pitchfork on a summer morning, something the old man remembered some seventy years later.

Robinson, Pringle, and Perry were all students of the natural world. Robinson was an artist and writer, who grew up at his family's estate, Rokeby (now a museum on Route 7 in Ferrisburgh), and lived nearly all his life there, painting the landscape and writing stories about its people—hill farmers, Abenaki, and French Canadians. He saw the railroad built and the forests cut, and wrote of his disappearing beloved wild places and woods people. Pringle, for whom the herbarium at the University of Vermont is named, grew up on the family farm in East Charlotte and learned botany from the Lewis Creek plants. First a farmer, he became a plant hunter who explored Mexico and sent back specimens to Asa Gray at Harvard, eking out a living selling sets of pressed plants. Kevin Dann has told Pringle's rather lonely life movingly. Perry was a minister and an amateur geologist, who described and interpreted the vivid red rock we now call Monkton quartzite and the fossils to be found in western Vermont. His work was known and respected by New England's geologists. He was both a devout Christian and a believer in science, a student of Darwin and a man who found his God in rocks as much as in prayer.

The book is illustrated with portraits, two of Robinson's drawings, and with details of the 1871 Beers *Atlas of Addison County, Vermont*. As with *Wetland*, *Woodland*, *Wildland*, I wanted more geographical in-

formation, so I read the book with a Vermont atlas open nearby. Many passages make the reader wish to see the places described.

The author takes care to document not just the prominent English, but all the watershed's citizens: Native Americans, freed slaves, French, and Irish. Prejudice drove the Abenakis almost to oblivion, identified locally only as "gypsies" and "pirates." Dann also devotes a chapter to Vermont's part in the eugenics movement in the 1920s and 1930s, when some in power in academia and government felt that the blood lines of Vermonters needed to be pruned and purified by sterilizing the unfit. It hurts to remember our injustices and errors, and it is humbling to know how ignorant and wrong we can be even when we mean well.

Lewis Creek runs through all the stories: of hunters, farmers, fishermen, trappers, botanists, preachers, and artists; of mountains, bogs, cedar cliffs, ducks, otters, and oak trees. Dann has found and saved rich and varied stories in this book, and woven them together with the river.

SUSAN SAWYER

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The Vermont Owner's Manual

By Frank Bryan and Bill Mares (Shelburne, Vt.: New England Press, 2000, pp. xiv, 125; paper, \$12.95).

Messrs. Bryan and Mares have again entered the field to enlighten us on the born-here Vermonter/woodchuck/flatlander question. Their first effort was *Real Vermonters Don't Milk Goats* (1983), a humorous work of definition. Now comes *The Vermont Owner's Manual*, a self-help guide for cranks, or "How to grumble effectively." My own crankiness was at work one day when a couple from Ohio asked me, "What does that woman on the State House dome stand for?" I told them, "Because she doesn't have room to sit down." Vermonters usually think that a funny story. Others are not so sure. If humor is not somewhat annoying, why bother?

The wit and humor in this book serve a serious purpose, i.e., Vermont needs special care because it is a special place. It is crucial to make light,

so as to hold back the dark. The authors offer very funny advice on many things, including how to get through deer season and town meeting without losing it, how to get your kids educated instead of educationalized, and how to combat cant in all its forms. No consultants need apply. In short, the book offers suggestions on how to keep freedom and unity alive and well in Vermont.

To use a flatlander term that will get the authors somewhat peeved, this is a niche book. Put it on that porcelain box in the smallest room at your place. Then enjoy a few pages while you do more important things. If you do not enjoy this book, the authors will be around to revoke your Vermont ownership papers.

Finally it should be noted that their earlier work ended with the comment, “Real Vermonters don’t read books like this.” No such pronouncement occurs in the owner’s manual.

BARNEY BLOOM

Barney Bloom is a Washington County side judge, a unique Vermont office so obscure that it is barely mentioned in the owner’s manual.

The Tour to the Northern Lakes of James Madison & Thomas Jefferson, May–June 1791

Edited with an introduction by J. Robert Maguire (Ticonderoga: Fort Ticonderoga, 1995, pp. 40, paper, \$9.95).

In the spring of 1791, the same year the independent republic of Vermont was admitted to the Union, the new state was visited by two of the most eminent political statesmen in the national government, Congressman James Madison and Secretary of State Thomas Jefferson. The two Virginians had set out incognito from New York City with plans to travel northward to the region of Lakes George and Champlain and then take an easterly course to the New England coast. The travelers had not visited the North Country before and viewed their trip primarily as a recreational journey, however the excursion did seem to have some political overtones. At the time, both Madison and Jefferson were at the center of a political coalition opposed to the fiscal and economic proposals devised by Secretary of the Treasury Alexander Hamilton—proposals

that constituted a key element in the legislative agenda of the nascent Federalist Party. Federalists were inclined to view Madison and Jefferson's northern "botanizing" tour as a transparent ploy to gain political advantage.

On the other hand, substantial evidence suggests that the excursion was largely prompted by the need felt by Jefferson and Madison for a respite from the pressure of their duties in Philadelphia, then the national capital, and their interest in studying the geography of northern New York and New England. In 1791 Jefferson was chair of a committee of the American Philosophical Society formed to investigate the Hessian fly, a destructive pest that had caused considerable damage to wheat crops. He planned to use a portion of his excursion time to survey the impact of the fly over the previous six years.

Jefferson had another interest in the North Country relating to natural history that is not commonly known. While serving as minister to France from 1784 to 1789, he had resolved to prove that the great French naturalist Count Buffon's theory of degeneracy of life in the New World was invalid. Jefferson asked General John Sullivan of New Hampshire to make arrangements to procure and transport specimens of moose, elk, and deer to France, where they presumably would demonstrate to Buffon that the productions of nature in America were, in reality, not puny or inferior. After several attempts by hunters to bag a moose in the northern wilds, a large specimen was finally killed in Vermont, probably near the center of Brookfield (according to Anna Clark Jones's neglected article, "Antlers for Jefferson," *New England Quarterly*, XII, no. 2, 1939), and was sent to France along with specimens of other animals at considerable expense to Jefferson. The "sage" of Monticello must have eagerly anticipated traveling to the region from which the moose originated.

While on their tour to the North Country both Jefferson and Madison hurriedly jotted down their observations. The editor of *The Tour to the Northern Lakes*, J. Robert Maguire, offers a transcription of Madison's five-page journal (May 31 to June 7) as well as a facsimile version of the manuscript. Jefferson's transcribed journal (May 22 to June 3) is substantially shorter, but is supplemented by a table of distances and an interesting rating of inns where the travelers were entertained. Additionally, the editor includes Jefferson's notes on the Hessian fly. Only one of Jefferson's journal entries, that describing Lake Champlain, is reproduced in facsimile. While these manuscripts have been transcribed and printed before in definitive editions of the papers of each author, Maguire has performed a useful service by making the travel journals of Madison and Jefferson more accessible to the general reader.

The great majority of the entries in the journals kept by Madison and Jefferson focus on the Upper Hudson River Valley and the Lake George-Lake Champlain region. The journals contain little in the way of characterizations of Yorker or Yankee culture and no mention of politics. They are also devoid of the Romantic rhetoric that travelers used a generation later to describe the landscape. Instead, the journals focus, in a matter-of-fact fashion, on the region's topography, flora, fauna, agriculture, commerce, and industry.

At Waterford, New York, for example, Jefferson observed a workshop where nails were cut out of bar iron at the rate of twenty per minute and was so favorably impressed that he later introduced nail making at Monticello. Both travelers were interested in the possibilities for commercial production of maple sugar as an alternative to reliance on cane sugar from the West Indies. In fact, in the previous year Jefferson had made an unsuccessful attempt to establish sugar maple saplings on his plantation in the Virginia piedmont.

Jefferson found Lake George more attractive than Lake Champlain. He noted in his journal that sugar maple, pitch pine, white pine, fir, and cedar were the forest trees that predominated around Lake George, along with cherry, aspen, willow, birch, and basswood. The lake and its environs were "healthy," but largely uninhabited. Its water was "very clear" and abounded with salmon, trout, bass, and perch. Jefferson and Madison encountered rattlesnakes in the vicinity of the lake and killed two of them. The lake was also infested with "swarms of musketoos and gnats, and 2 kinds of biting fleas." Nevertheless, Jefferson described Lake George in a letter to his daughter as "the most beautiful lake I ever saw."

James Madison's commentary about settlers on the shore of Lake George reveals his special interest in a "free Negro," Prince Taylor, who owned a 250-acre farm where he employed six "white hirelings." Madison observed that Taylor was intelligent, literate, and a good manager. It seemed significant to Madison that Taylor was "disinclined to marriage," or to having women on his farm in any capacity.

Lake Champlain impressed Jefferson as "less pleasant" than Lake George, but he saw only its southern end, where the water was "narrow and turbid." The lake, according to Jefferson, yielded sturgeon and twenty-pound catfish, but was infested with mosquitoes. The land on the west side, hemmed in by mountains, was "very indifferent," but land on the opposite side of the lake extending twenty to twenty-five miles to the Green Mountains on the east he described as "champaign." Natural growth on Lake Champlain was much like that viewed at Lake George, except for the presence of yellow pine and "thistle in much abundance as to embarrass agriculture in a high degree." Madison

found the soil on the east side of Lake Champlain “generally good.” Wheat and grass (especially red clover and timothy) were listed as staple crops, but corn, rye, potatoes, and flax were also cultivated. Wheat and flour, along with pot and pearl ash, are noted as the chief export items. Madison also reported the smuggling of tobacco, brandy, and tropical fruits into Canada, via Lake Champlain.

Due to strong headwinds Madison and Jefferson could sail up Lake Champlain only about twenty-five miles before their northward progress stopped. At that point they reversed direction to return to Saratoga and from there proceeded to Bennington, where Jefferson assigned his highest rating of “good” to Dewey’s Tavern. Madison observed that the farms in the southwestern corner of Vermont ran from fifty to two hundred and fifty acres in size, and that the price of cultivated land ranged from five to fifteen dollars per acre. Most settlers were from other parts of New England and followed a lifestyle Madison described as “extremely plain & oeconomical particularly in the table & ordinary dress.” Their houses, built of wood, made “a good figure without,” according to Madison, but were “scantily furnished within.” From Bennington the travelers turned south to Pittsfield, Massachusetts, and then proceeded eastward to Northampton on the Connecticut River, which they followed to Long Island Sound.

The Tour to the Northern States is a slim but handsome volume that is a credit to all involved in its preparation and production. Editor J. Robert Maguire, a meticulous scholar highly knowledgeable about the history of the Lake George-Lake Champlain region, offers an illuminating introductory essay that serves as an important key for interpreting the journals of Jefferson and Madison. Readers looking for additional background detail will also want to see Willard Sterne Randall and Nancy Nahra, *American Lives*, vol. I (New York, 1997), 124–133. The journals are enhanced by well-selected portraits, maps, and other illustrations. The superior quality of the book design by Christopher Kuntze and the very high standards of Sharp Offset Printing of Rutland, Vermont, are also worthy of note. Additionally, the use of Mohawk Ticonderoga archival paper adds to the richness of the volume. In sum, *The Tour to the Northern States* is a carefully prepared and beautifully crafted publication that offers readers convenient access to interesting and significant observations of the North Country by two of the most discerning and sophisticated Americans of the late eighteenth century.

GARY T. LORD

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*The Gods of the Hills: Piety and Society in
Nineteenth-Century Vermont*

By T. D. Seymour Bassett (Montpelier, Vt.: Vermont Historical Society, 2000, pp. 324, paper, \$26.95)

Rejecting the New York lawyer James Duane's 1770 overture to quash the New Hampshire Grants crisis in its infancy, Ethan Allen cast the settlers' cause neither in political nor economic but rather in sacred terms. Much as he would later legitimize his capture of Fort Ticonderoga "in the name of the Great Jehovah," so Allen warned Duane that the "gods of the [Vermont] hills are not the gods of the valleys." By borrowing a portion of Allen's observation for the title of his work, the late Tom Bassett sets forth his desire to demonstrate its prophetic accuracy and tell the unique story of "Piety and Society in Nineteenth-Century Vermont."

While the first chapter provides a brief outline of developments "in the woods before 1791," the true starting point for Bassett's exploration is the evolution of Vermont's distinctive and unifying "civil religion." Much as the nation as a whole sought to sanctify its revolution through the guise of sacred figures (George Washington) and sacred objects (the Constitution, flag, etc.), nineteenth-century Vermonters shaped a set of sacred creeds that would continue to unify and guide civic behavior. Foremost among these was Vermonters' uncompromising belief in the ideal of equality, which shaped the state's contribution to the Civil War. The story of Vermont's "civil religion," particularly cast in the light of modern political fractionalization and uncertainty, is itself sufficient reason to purchase and read this book.

It is Bassett's formidable study of Vermonters' particular or disparate pursuits of the sacred that makes this a most illuminating work. His examination in chapter three of what he calls "the open race between the denominations" during the first four decades of the nineteenth century provides a uniquely accessible introduction to the competition between traditional Calvinists (Congregationalists, Baptists, Episcopalians, Presbyterians). This rivalry was, in many ways, more intense than their collective struggle against the rationalistic Methodists, Universalists, and the unchurched. Even before the arrival of significant numbers of Irish and French Catholics, the vitality of Vermont's religious landscape, especially as evidenced through the spirit of Second Great Awakening revivals, bore witness to the power of religious competi-

tion. One particular episode, involving the controversial “new measures” used by New York itinerant preacher Jedediah Burchard during a tour in 1834–1835, underscored both the post-millennial desire of evangelicals to convert the masses and the dangerous ramifications of the effort.

The collapse of the Awakening, the large scale arrival of Catholics, and the gradual march toward Civil War marked the beginning of a new religious era in Vermont. Over time, Vermont would become residence not only for a pluralistic society including Protestants, Catholics, and Jews, but also for an assortment of new institutions and religious organizations. As Catholics planted churches and schools, Protestants searched for common ground and new vehicles with which to work together. Evangelicals returned to the instrument of the revival in 1877, sponsoring a protracted meeting in Burlington led by the renowned and, Bassett notes, “housebroken” Chicago itinerant Dwight Moody, with his musical accompanist Ira Sankey. Concomitant with the success of evangelicals, numbers of nonevangelicals countered by moving toward “Modernism,” emphasizing a need to better connect religious activity with the vision of progress that accompanied industrial prosperity. Missions, associations, and new social organizations would thus develop on all sides to support their respective efforts.

The challenge of tying together the myriad personalities and events of the nineteenth-century religious landscape, even before delving deeper into underlying beliefs, could only have been undertaken by Tom Bassett, given his unparalleled familiarity with the bibliographic resources and his lifelong interest in Vermont religion. This comprehensive work, portions of which appeared previously as articles in *Vermont History*, distills more than sixty years of Bassett’s research and insights. It constitutes essential reading for anyone interested in understanding the power of the “sacred” upon nineteenth-century Vermonters’ lives and the full range and patterns of religious experience that accompanied their beliefs.

P. JEFFREY POTASH

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George Perkins Marsh: Prophet of Conservation

By David Lowenthal (Seattle: University of Washington Press, 2000, pp. xxv, 605, \$40.00)

This biography of George Perkins Marsh (1801–1882) by David Lowenthal is not merely a revision of his earlier *George Perkins Marsh, Versatile Vermonter* (1958). Rather, it is a wholly new biography based on fifty years of new scholarly research. In Lowenthal's words: "I had to reconsider histories, reassess motives and outcomes, revise and reverse judgements. This forced me to unravel, even jettison, earlier work and add new matter in its stead" (p. xx). The result is truly remarkable.

Foremost, this is a masterful analysis of the origins and lasting impact of Marsh's monumental *Man and Nature* published in 1862. In Lowenthal's words, the book "brought environmental awareness and reform not just to America but to the whole world. More than Marsh had dreamed, *Man and Nature* ushered in a revolution in the way people conceived their relations with the earth" (p. 268). He thus ranks it with Darwin's *On the Origin of Species* as "one of the nineteenth century's two seminal texts on the subject its title denoted" (p. 305).

Lowenthal's book is not, however, just an apologist's defense of Marsh's ideas and writings, which have come under criticism by some modern environmentalists. Rather, it is a superb example of historical biography rich in detail, context, and insight. For this reviewer, few other biographies have left the impression of personally encountering the individual described, of having "been there." That is in great part because of Lowenthal's devoted attention to Marsh's life story for over fifty years, which also makes it difficult at times to know who is speaking. While he is very careful to quote Marsh accurately, his own syntax often echoes Marsh so closely that the reader can easily forget that the author and subject were not intimate friends.

This apparent firsthand familiarity is especially reflected in Lowenthal's exquisite descriptions of daily life in the nineteenth century, of travel conditions, dress, and social protocol. Even more so are eyewitness accounts of personal events gleaned from letters and diaries, but described afresh in ways that make the details vital to understanding the meaning of the event to the broader story. This portion, for example, describes Marsh's death:

Marsh's body was . . . wrapped in an American flag, put on a catafalque with wreaths of yellow immortelle, and carried down the mountain by forestry students. They thus honored the scholar whose

work had awakened so many to the significance of their calling. Winding down through the dark woods, the cortege was met at sunrise by town officials (p. 310).

Similarly, Lowenthal provides fascinating insights into Marsh's life story by providing thorough historical context. Be it Marsh's early years in Vermont, his service in the U.S. Congress just prior to the Civil War, or his decades as the American envoy to Turkey and Italy, the reader finds rich descriptions of people, politics, and the passions of the times and places encountered. This meticulous attention to context is important to Lowenthal's thesis that "every aspect of Marsh's life is implicated" in his having written "an analysis that has revolutionized not just American but global awareness" (p. 310).

Lowenthal is masterful in weaving together the whole of Marsh's remarkable life: his wide-ranging scholarly interests, diverse personal experience, command of myriad languages, and unflinching ability to criticize and reverse himself in the light of new evidence and experience. "Reminded he had once held some contrary opinion, [Marsh] would say, 'A man who cares for the truth cannot afford to care for consistency'" (p. 290). The final two chapters of the book are in accord with this dictum, as Lowenthal attempts to put Marsh's contributions into contemporary perspective.

While he asserts that Marsh was "not primarily a crusader" (p. 391) nor an "environmentalist" (p. 392) because of his optimism and commitment to early conservation ideals, Lowenthal is clear that Marsh's basic maxims are no less valid today. He carefully dismantles the claims of some current environmentalists that Marsh was too "optimistic, utilitarian, technocratic, manipulative toward nature" (p. 416). Finally, he concludes that "Marsh's *Man and Nature* marked the inception of a truly modern way of looking at the world" (p. 429) and that "Marsh was the first to show that human actions had unintended consequences of unforeseeable magnitude" (p. 430).

No brief review of this remarkable book can do justice to the complex and fascinating portrait the author paints of a person ahead of his time, a man for all seasons. It must be read by anyone who cares about the future of the global environment and treasures the wisdom of the past as exemplified in Marsh's life and writing. For the Vermont reader, this book will elevate Marsh to the very top of the list of our state's heroes, unsung and celebrated alike.

CARL H. REIDEL

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An Odd Kind of Fame: Stories of Phineas Gage

By Malcolm Macmillan (Cambridge, Mass.: The MIT Press, 2000, pp. xiv, 562, \$39.95).

The most loyal Vermont historian has to admit that aside from the births of several people who achieved prominence elsewhere, very few events of truly international significance have ever occurred in Vermont. But wait. There is one Vermont event that has made its way into many an introductory psychology textbook and certainly into the lore of neuroanatomy. It may well be the most truly historic thing ever to happen in Vermont. It is also among the least well understood.

In brief outline, here is what happened. On September 13, 1848, Phineas Gage, twenty-five-year-old foreman of a work crew at a Rutland and Burlington Railroad construction site in Cavendish, had placed a tamping iron in a boring in rock with a charge of explosive, and the explosive went off, driving the iron out of the hole and through Gage's head, entering the left cheek and emerging around the middle of the top. In modern neurosurgical terms, the iron bar performed a crude left frontal lobotomy.

Attention was first attracted to the accident in the newspapers and medical journals of the day by the fact that Gage survived. Under the care of local physicians, notably Dr. John Martyn Harlow, he weathered hemorrhage, infection, and seizures, and by early November was out and about, had clear memory of the accident, and, according to the incomplete measurements and reports made at the time, had lost no detectable sensory or motor function and no significant cognitive skills. He did, however, have a recognizable personality change. From being a well-organized and level-headed man of business, Gage became impetuous, unreliable, and—so some said in an era when this might have been noticeable—much more foul-mouthed than before. Occurring as it did in a time when the brain's neurological functions were first being localized to different cerebral structures, his injury helped advance understanding of brain structure-function relationships, particularly the role of the neurologically relatively "silent" frontal lobes. As we still read in psychology textbooks, the frontal lobes sit there behind your forehead and don't really seem to do much, but if you lose one, something doesn't work quite the same. Decades after Gage's time, neurosurgeons would try detaching frontal lobes, or portions of them, from the rest of the brain circuitry in an effort to treat severe depression and other mental illness.

Phineas Gage lived until 1860, able to do a number of jobs competently if not quite so responsibly as before. His death was brought on by seizures undoubtedly related to his injury. Some time after he died in California, his skull was exhumed and moved to the Warren Anatomical Museum at Harvard Medical School, where it still is kept with the original tamping iron.

At about the time that Cavendish was staging a gala event to commemorate the 150th anniversary of the Gage accident in 1998, Australian psychologist Malcolm Macmillan was climaxing years of combing the archives of Vermont, Massachusetts, California, and even Chile (where Gage lived briefly during his post-lobotomy years) for every shred and scintilla of evidence he could find about the circumstances of the injury, its precise anatomical, physiological, and psychological effects on Gage, and its role in future knowledge of neurophysiology, neurosurgery, and psychiatry. The result is the present book, which tells you in over five hundred pages more than you ever thought you wanted to know about Gage and his accident. It also tells you less than you thought you knew, because this is as detailed and thorough an example as you will ever see of the sort of historical study that asks the question, "How do we know what we think we know about this event?"

Macmillan discusses at least five threads of the story. (I list them not precisely in the order in which he takes them up.) First, is the basic narrative of Phineas Gage: who he was, what he was like before the accident, how the accident happened, what it did to his brain, how he was cared for afterward, and how his life and personality proceeded in his remaining dozen years. Clearly, we know far less about all of this than we would desire. Our understanding of Gage's personality prior to the accident is based on a few conclusions inferred from the type of work he did, plus a few words in Harlow's published accounts. Even with his skull available for study (including long-post-mortem CAT scans), we don't know exactly how his brain was injured. And we have very scanty evidence of his post-accident activities and personality. It is reasonably clear that he changed dramatically, but the contemporary case reports understandably lack the reproducible neuropsychological testing data that modern scientists might demand of such an account, and neither Gage's involvement with his medical caregivers nor their writing skill and style offer much insight. Macmillan does the best he can to tie down objective details of Gage's life, including correcting a frequently repeated error about his death date, but Phineas Gage left few documentary footprints.

Second, is the story of what was known or believed about brain function and localization before 1848 and how that knowledge advanced in

the century and a half since, with or without insights from the Gage episode. Macmillan's summary of this matter is interesting and relevant, but it is presented in language for which the adjectives dry and scholarly may understate the case. The reader who is not immersed in this branch of the history of science will not find this section of the book a very rousing read. (In Macmillan's defense, I should point out that he realizes this and so warns his readers in the introduction.) A prominent point made here is that there is no clear intellectual path between reports of the Gage injury in the medical literature and the development of the psychosurgical procedure of prefrontal lobotomy.

The third element is Dr. Harlow, under whose care Gage recovered, and whose accounts of the incident played a large role in bringing it to scholarly attention at the time and remain the most important primary source record of the events. The influence of Dr. Harlow's personality, training, and opinions, as well as those of others who reported on Gage (notably Henry Jacob Bigelow), are studied in relationship to their effects on our understanding of what happened. This account lapses into a few utter irrelevancies, including Harlow's genealogical lineage from an early Plymouth, Massachusetts, settler and the Civil War career of a soldier on whom he did an induction physical exam, but knowing something about Harlow does put his case reports in context. The book includes full facsimile reprints of his and Dr. Bigelow's reports, so the reader can see in detail what both men chose to tell the world about Gage. Publication of these rare resources is in itself a major service. We can agree with Macmillan that manuscript case notes would be a wonderful addition to this record; alas, none seem to have survived.

Fourth, the Gage story took on a mythological life of its own over 150 years, often emerging at variance from the truth in amusing ways. Among the crazier bits of misinformation to turn up from time to time was the notion that Gage lived for the rest of his years with the tamping iron lodged in his head. (The thing is about three feet seven inches long and an inch and a quarter in greatest diameter.) At a more intellectually subtle level, Macmillan discusses the degree to which retelling of the Gage story, like so many other historical narratives, has changed as times and philosophies have changed, being molded to suit the needs of the teller.

Finally, intertwined in the narration of all of these threads, is Macmillan's detective work uncovering them. For all of the fame the Gage injury may have had, no one has ever looked at it so carefully before. Macmillan's dogged search is greatly to be admired, but at times it intrudes unduly into the text of the story. "According to the Town Records of Lebanon in the New Hampshire State Archives in Concord, Jesse,

who fathered our Phineas, married Hannah Trussell Swetland of East Lebanon, New Hampshire, on 27 April 1823. This date is confirmed by records created by the Plummer-Wills families, now in the care of Robert Leavitt, and by C.V. Gage and Roberts” (pp. 15–16). This in the text of a book that also has thorough footnotes and a 49-page appendix with reference listings.

Beyond any doubt, anyone pretending to show expertise on the Phineas Gage story will now need to turn to this book as the bedrock of scholarly understanding of the episode and its consequences. The casual reader may yet wish for an easier road to understanding the subject.

JOHN A. LEPPMAN

John A. Leppman is a practicing physician and a Vermont Historical Society trustee.

*Through Hell and High Water in Barre, Vermont.
25 Eyewitness Accounts of the Flood of '27*

By Patricia W. Belding (Barre, Vt.: Potash Brook Publishing, 1998, pp. 114, paper, \$11.95).

Natural disasters have a way of becoming the benchmarks of local history. The “’27 Flood,” as it has come to be known in Central Vermont, along with the flu epidemic of 1918–1919, are two events of the first half of the twentieth century that Central Vermonters use as reference points as time passes. Barre author Patricia (“Pat”) Belding, during the months of February and March 1977, sought out survivors of the largest flood in the history of Central Vermont, and recorded the recollections of twenty-five people who lived through the frightening days of November 3rd and 4th, 1927. She transcribed the tapes, and has made the memories of local citizens the centerpiece of her well-organized and wonderfully convincing book about that fateful day. Of the twenty-five people she interviewed, all have now passed on.

The cause of the Barre flood was the joining of two storms over Central Vermont on November 3rd and 4th. In October, Central Vermont had experienced a 50 percent increase in rainfall and the rivers were already high; the ground was saturated with water. Then came a torrential

downpour of 8.63 inches in thirty-nine hours, which caused all the mountain streams and rivers to “burst their banks.” Throughout Vermont, rivers including the Connecticut, White, Winooski, Otter Creek, Missisquoi, and Lamoille overflowed their banks. The Winooski River valley was hardest hit, and “toted the greatest number of deaths. Houses, barns, livestock, cars and other debris were caught in the current and carried for miles” (p. 2).

Each of the twenty-five different voices, in telling their stories, provides unique insight into this moment in time. Gerald Cunningham recalls the tireless efforts of George Cruickshank, a ham radio operator, who for two days or more was Barre’s only connection with the outside world. Cunningham’s words make it possible for those living today to understand the kind of isolation the community experienced.

“Gene” Pierce, who nearly drowned himself, tells of the tragic deaths of Ralph Winter and Gerald Brock in the basement of Roger’s store. Pierce recalls, “And gee, two nicer fellows never lived . . . never lived” (p. 8).

Rose Sassone’s recollections, leading up to the birth of son Vincent, are fascinating reading. The birth finally took place in a caretaker’s cottage behind Goddard Seminary. Sassone’s words ring true, in a manner not possible from a second-hand account.

Up and down Main Street small businessmen and their employees sought ways to help one another. Each story brings the Barre community to life in the mind of the reader, and we learn not only of the tragedy, but also of the sense of community that existed at the time.

Humor, pathos, and curiosities are present in each of the individual stories. For those of us just slightly removed from this time, the voices of the people come alive again, with clarity and authenticity. The flood was vivid in the minds of members of my family while I was growing up in Barre. The stories of the flood were told so often that upon reading Pat Belding’s book I found myself revisiting events with which I was quite familiar, though I was not born until several years after the flood occurred.

With a superb collection of photos, most of them new to me, Belding has put a human face on the “’27 Flood.” Over seventy photographs are interspersed throughout the book; almost all are exceptionally clear. Photographer Howard Rockwood took the majority of the pictures, though some were made by “unknown photographers.” All have now found their way into the Aldrich Public Library’s photo archives.

Patricia Belding is a retired librarian who has lived in Barre with photographer husband John and son Russell since 1963. Her book on the ’27 Flood is a major contribution to the history of Barre. It is a first-

class work that will be read for many years, and one that local historians will treasure for all time.

THOMAS C. DAVIS

Tom Davis was the Director of U.S. Senator Patrick Leahy's Vermont office for fourteen years. A former Vice President of the Vermont Historical Society, he will be publishing Out from Depot Square, an anecdotal history of Barre, in the summer of 2001.

Northern Comfort: New England's Early Quilts

By Lynne Z. Bassett and Jack Larkin (Nashville, Tenn.: Rutledge Hill Press, 1998, pp. 118, paper, \$19.95).

In the spring of 1998, Old Sturbridge Village in Massachusetts hosted a conference on the topic, "What's New England about New England Quilts?" During the day-long workshop, participants listened to papers on subjects ranging from quilt block styles to diary references about quilts to textile manufacturing. Representatives from each of the New England states also reported on the results of their statewide quilt documentation projects. The speakers and participants agreed that there is, indeed, something distinctive about New England's quilts.

By good fortune, the book that is the subject of this review had just been published and was available at the conference. Written by two members of the OSV staff, Director of Research Jack Larkin and Curator of Textiles and Fine Arts Lynne Bassett, the book delves into most of the topics covered by the conference. It draws upon the museum's collection of nearly two hundred and fifty early (1780–1850) New England quilts, plus thirty-two published and manuscript diaries, to trace the history of New England quilting and the differences that set the region apart from the rest of the United States.

American quilting came from England, whose model American women followed for two centuries. While it is probable that the first settlers brought quilts with them, Pilgrim mothers did *not* piece quilts during the "Mayflower" crossing—nor for more than a century following it. Indeed, New England's first quilts were not pieced at all, and were certainly not cotton—they were whole cloth (all one piece of plain fabric), and wool. Prior to the 1750s, most quilts were imported from En-

gland, and were the work of professionals in the upholstery trade—male master quilters, working with poorly paid female helpers.

Textiles in the seventeenth and eighteenth centuries were expensive, as estate inventories plainly indicate, and such quilting as took place on the stony soil of New England was the pastime of the well-to-do. The idea that American quilts had always been made to use up leftovers from other sewing projects became current around the time of the Centennial celebration, when quilting and quilting parties became a “picturesque symbol of an idealized past in which everyone was hard-working, cooperative, frugal, and productive” (p. 113).

An estate inventory in 1633 is the earliest reference to “bed quilts” (as opposed to quilted petticoats or underskirts, which were also called “quilts”), although no documented seventeenth-century American quilts survive; the earliest quilt to bear a date on its surface was made in 1785, and is pieced wool. Few quilts were made in New England before 1750, and few were fashioned of imported wool or silk; in the words of the authors, these were “items of conspicuous display and symbols of wealth” (p. 11), and were reserved for upper-class households.

Even so, wool quilts were imported in large numbers through the end of the eighteenth century, interrupted only by the American Revolution. When quilted petticoats and whole cloth quilts fell out of fashion in England around 1800, exports of those items to America stopped, though the British continued to sell the fine wool yardage needed to make quilts. (When New England mills began producing wool cloth of a comparable quality, it was due in large part to Consul William Jarvis of Weathersfield, Vermont, who imported the first large flock of Merino sheep, with their long-fibered wool, about 1810.)

As New England mills started producing printed cotton fabrics in the late 1820s, the look and texture of the region’s quilts changed. Cottons were expensive at first, so their use was confined to wealthier families, but as the price came down, the vast array of printed fabrics became available to greater numbers of women, with the result that more and more quilts were made. However, tens of thousands of yards of expensive French and English cottons also poured into this country well into the mid-nineteenth century, much of it ending up in quilts.

American quilting began to diverge from the British pattern with the advent of mass-produced cotton goods, and by the mid-nineteenth century, American quilting no longer resembled its British progenitor. American women branched out from hexagons into squares, triangles and diamonds; they used the running stitch to sew their pieces together, abandoning the time-consuming method of sewing every piece onto a separate paper template, and then joined the smaller sections to-

gether in blocks and strips, further speeding the process. They cut the corners out of their square or rectangular quilts to make them fit without bunching around the posts on their four-poster beds. By about 1810, they began making white whole cloth quilts modeled on the so-called Marseilles coverlets loomed in France; they began to tie, rather than quilt, some of their quilts by the 1820s; and they took up appliqué in the late 1830s, following the lead of quiltmakers in Pennsylvania and Maryland. By 1850, a distinctly American style of quilting had emerged, with differences from region to region.

The authors of *Northern Comfort* plainly know their subject matter well; the book is both informative and entertaining. It is lavishly illustrated, with seventy-three plates, of which thirty-six show complete quilts. The bibliography is extensive, and the text is well footnoted.

Northern Comfort should be on the shelf of anyone interested in quilts, folk art, or New England's textile history.

RICHARD L. CLEVELAND

Richard L. Cleveland of Northfield is chairman of the Vermont Quilt Festival, a member of the Vermont Quiltsearch documentation team, and co-author, with Donna Bister, of Plain and Fancy: Vermont's People and Their Quilts.

In this second edition of their classic text, Klyza and Trombulak use the lens of interconnectedness to examine the geological, ecological, and cultural forces that came together to produce contemporary Vermont. They assess the changing landscape and its inhabitants from its pre-human evolution up to the present, with special focus on forests, open terrestrial habitats, and the aquatic environment. This edition features a new chapter covering from 1995 to 2013 and a thoroughly revised chapter on the futures of Vermont, which include discussions of Tropical Storm Irene, climate change, eco-regi History. Like the rest of New England, Vermont was one of the original areas to be settled by European colonists in the 1600s. The French were first on the scene, founding Fort Lamotte in 1666 as part of their New France territory. The British soon set up their own settlement at Fort Dummer in 1724 to protect their towns of Brattleboro and Dummerston. The war's end saw New York, New Hampshire, and Massachusetts all lay claim to half of Vermont. This created major problems for the original settlers. As a result of the unresolved territory dispute between the American colonies, Ethan Allen and his brothers founded the Green Mountain Boys in 1770. This informal militia served to protect local Vermont settlers' lands. Vermont - Vermont - Cultural life: Vermont's often low-key and rural character is complemented by strong involvement in artistic and cultural pursuits. Many artists and scholars have followed such famous literary figures as Sinclair Lewis, Pearl Buck, Robert Frost, and Robert Penn Warren in maintaining vacation homes in the state. Painters find inspiration in the landscape, and sculptors adapt old materials and forms from barns and antique shops to contemporary uses. Kayaking at Sand Bar State Park, Milton, Vt. Dennis Curran/Vermont Department of Tourism and Marketing. History. Exploration and settlement. Paleo-Indians began to move into northern New England about 9000 bce, at the end of the last ice age. .The Story of Vermont: A Natural and Cultural History. By Christopher McGrory Klyza and Stephen C. Trombulak (Hanover, N.H.: University Press of New England, 1999, pp. 252, paper, \$19.95). C. Each offers new layers to our knowledge of the natural heritage of Vermont, using very different approaches. When you stand in the woods, or at the edge of a river, what do you see around you? Why is one set of plants in a particular spot, and not another? Those interested in restoring a natural community that has been lost to cultivation, such as a riverine floodplain forest, can use the book to determine what plants were probably once there and would thrive there again, and which are invasives that need to be controlled. The geologic history of Vermont begins more than 450 million years ago during the Cambrian and Devonian periods. Human history of Native American settlement can be divided into the hunter-gatherer Archaic Period, from c. 7000-1000 BC, and the sedentary Woodland Period, from c. 1000 BC to AD 1600. Vermont was admitted to the United States as the fourteenth state in 1791 after a brief period of sovereignty following the American Revolutionary War. Vermont experienced rising abolitionist sentiment and