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"I am of the earth earthy": Snapping Turtles, Nature, and Thoreau's Journal

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The Writings of Henry D. Thoreau
Davidson Library
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On the mornings of September 2 and 3, 1854, less than a month after *Walden* was published, Thoreau walked around Concord, Massachusetts, as he did most days in his life, and recorded his experience in his Journal. He saw "many more sparrows in the yard" and noticed their "ashy under sides" as they flew. He observed the rich, variegated autumnal tints of plants: yellowing, fairly yellow, brown, yellowish green, "scarlet & dull red--beside green." He tasted the "handsome ripe grapes with the bloom on them"; smelled the dry smoke from burning woods and meadows; and heard the "shrill quacking" of what he thought "must be a solitary wood? duck". He bathed in Hubbard's Pond, feeling "a very important & remarkable Autumnal change" in the "surprisingly cold" water. He also opened a snapping turtle's egg and observed it closely: "The young alive but not very lively with shell dark greyish black--Yolk as big as a hazel nut--tail curled around and is considerably longer than the shell. & slender 3 ridges on back--one at edges of plates on each side of dorsal which is very prominent as There is only the traces of a dorsal ridge in the old. Eye open" (*Journal* 8, pp. 312-315).

This entry embodies the essence of Thoreau's Journal from around 1850, when he began to concentrate on detailed observations of botanical processes, seasonal occurrences, and other cyclic natural events. (The entire Journal comprises forty-seven manuscript volumes, amounting to 10,000 pages and covering almost twenty-four years of Thoreau's life.) These descriptions show Thoreau living in, being a part of, and interacting with nature, while conveying his experience in precise, poetic language and through evocative sensory images. On the one hand, he takes in his

surroundings in their breadth and completeness, immersing himself in the “essential facts” of nature through seeing, smelling, hearing, touching, and tasting. On the other hand, he pays keen and minute attention to small details and captures the movements, colors, shapes, sounds, textures, and patterns of the natural world. Guided by curiosity or interest and mediated by the season of the year and the time of the day, his exploration of nature illuminates the relationship between inhabitants of nature and their surroundings and between man and nature. In passage after Journal passage, we see Thoreau moving through the landscapes of his native Concord with both a panoramic sweep and a microscopic eye for detail, yielding a vision of nature that is rich, complex, evolving, and deeply affecting.

The story of the little snapping turtle, also called the mud turtle, offers a focal point for discussing four important aspects of Thoreau’s approach to nature: his interest in the growth and progression of life in nature, his practice of gathering facts by various means in search of the laws of nature, his view of nature as a living system of relationships, and his sense of himself as part of nature.

Thoreau was profoundly interested in nature’s cyclic, recurring pattern--birth, growth, maturity, decline, death, and rebirth. When he found the little snapping turtle in its egg on September 2, it was “alive but not very lively.” Thoreau left the seemingly “sickly & dying” turtle in the shell out on the grass in the rain, expecting it to die in a few minutes. But on September 3, he was surprised to find the shell “alone--& the turtle a foot or 2 off vigorously crawling--with neck outstretched--holding up its head & looking round like an old one. & feet surmounting every obstacle--”. The young snapping turtle “climbs up the nearly perpendicular side of a basket with the yolk attached” (*Journal* 8, pp. 312-313). By September 4, the turtle was living in a tub of water and mud and Thoreau was marveling at how “fast he learns to use his limbs & this world.” On

September 6, it “has a shell $1 \frac{7}{40}$ inch long or $\frac{4}{40}$ longer than the diameter of the egg shell--to say nothing of head & tail--” (*Journal 9*, September 4 and 6, 1854).

With fascination, Thoreau watched as the prematurely hatched turtle rapidly grew healthy and vigorous. But this is only part of the story. He had followed the life cycle of this turtle and its siblings for several months in the spring and summer of 1854. He saw the mother turtle on June 7; on the same day, he later learned, a Concord resident found the eggs. On June 18, he opened the turtle’s nest and took out 42 eggs. He opened one egg but “could detect no organization with the unarmed eye.” On July 30 Thoreau opened another egg from the same group and saw “a little mud turtle squirming in it ap. perfect in outline shell & all--but all soft & of one consistency--a bluish white--with a mass of yellow yolk (?) attached.” He surmised that it would be another month or more before it was hatched. On August 26, he describes yet another egg that he opened that day: “The young is now larger & dark colored shell & all--more than a hemisphere & the yolk which maintains it is much reduced. Its shell very deep hemispherical fitting close to the shell of the egg--& if you had not just opened the egg you would say it could not contain so much. Its shell is considerably hardened--its feet & claws developed & also its great head, though held in for want of room-- Its eyes are open--it puts out its head--stretches forth its claws--& liberates its tail though all were enveloped in a gelatinous fluid” (*Journal 8*, pp. 208, 246, 296).

The continuity and tenacity of a turtle’s life impresses and moves Thoreau. The turtles, he concludes, “not only continue to live after they are dead--but begin to live before they are alive” (*Journal 8*, p. 313). The tenacity, Thoreau suspects, partly comes from it having so “small amount of life.” He had heard stories about or seen with his own eyes turtles continuing to move after they were dead: when the head of a turtle was cut off, it “snapped at a dogs tail” and made him “run off yelping”; after being dissected, its heart would be found “beating or palpitating the next morning”

(*Journal* 8, p. 131). As he examined turtle eggs at various stages of their slow hatching, he saw how they began to live before they were ready to hatch. The turtle's life, as Thoreau sees it, defies categorical thinking about life and death and exemplifies the endless, cyclic progression from one stage of life to the next.

Thoreau's encounters with turtles and tortoises during 1854 reveal his methods for studying nature. He focuses his attention on some particular phenomenon or process; studies one or several aspects of it intently over time, sometimes for a considerable period of time; and comes back to it again and again, even year after year. Moreover, he approaches the object of his study from several different angles, working like the nineteenth-century natural scientist that he was. He observes plant and animal life closely, paying microscopic attention to minute details. He collects specimens, compares, counts, measures, and illustrates, with the eyes and tools of a scientist. He consults books written by authorities in the various fields of his investigation and compares notes with local farmers and fellow naturalists. In this way, his study becomes a cumulative, cyclic process itself, in which personal exploration often takes place in the context of an informal local network and a larger scholarly community, and in which each new encounter with nature builds on prior experiences and anticipates future discoveries. In this evolving process, Thoreau connects fact-gathering to the search for the laws of nature. "Let us not underrate the value of a fact", he writes at the end of his essay "Natural History of Massachusetts," because "it will one day flower in a truth" (*Excursions*, p. 000).

The May 17, 1854, entry, a little over six printed pages long, is a good case in point. Thoreau devotes almost four of these pages to a large snapping turtle that he sighted on a boating excursion. He first saw its snout above the water and paddled toward it. As he pushed up close, he observed its color, its "great head", and "vigilant eyes". He brought the turtle into his boat and drew

it from the landing to his house. There, he weighed it and took detailed measurements, starting with the shell at different points--extreme length, length in middle, greatest width. Adding the head, neck, and tail to the extreme length of the shell, he determined the whole length of the turtle to be 37 inches. He also measured the width of the head, the sternum, and the depth from the back to the sternum. He counted and measured the six "great scollops or rather triangular points on the hind edge of his shell". He observed the color and shape of his jaws, examined his "spiteful face" and "vigilant grey eye", and described his awkward walking with precision: "The edge of his shell was lifted about 8 inches from the ground--tilting now to this side then to that--his great scaly legs or flippers hanging with flesh & loose skin--slowly & gravely (?) hissing the while." He made three drawings: one of the turtle's "stout hooked jaws"--"the upper shutting over the under", a "more or less sharp triangular beak corresponding to one below"; one of his "head turned upwards with the ugliest & most venomous look"; one of the "triangular place on the bottom of his mouth--& an orifice within it through which apparently he breathed" (*Journal 8*, pp. 128, 129, 130).

Twice in his study, Thoreau compared his specimens to those described by D. Humphreys Storer in *Reports on the Fishes, Reptiles and Birds of Massachusetts* (Boston, 1839): he approximated the length of the turtle's head and neck (it was difficult to measure) by comparing it proportionally to that of one described by Storer; while looking at the turtle's toes, he questioned Storer's count of four claws on the hind legs: "Storer says that they have 5 *Claws* on the forelegs but only 4 on the hind ones-- In this there was a *perfectly* distinct 5th *toe* (?) on the hind legs" (p. 129).

Just as Storer's book is an important tool for measurements and identification of characteristics, local lore is a source of information invaluable to Thoreau's study of Concord's natural history. A most interesting example of Thoreau collecting local lore and exchanging

information with neighbors started with the shell of a mud turtle Marshall Miles gave to Thoreau. Miles, who was “very fond of” mud turtles, bought one of the two that Edward Garfield had caught in spring 1854, one weighing “43 or 4 lbs & the other 47.” Thoreau describes the shell in some detail in the August 26 Journal entry: “It is 15 $\frac{6}{8}$ inches long X 14 $\frac{1}{2}$ broad--of a roundish form--broadest backward-- . . . The upper shell is more than 4 $\frac{1}{2}$ inches deep & would make a good dish to bail out a boat with. Above it is a muddy brown--composed of a few great scales”. But Thoreau also relates the many mud turtle stories Miles told him--of Garfield catching them; of Miles killing them; of a Sudbury man accustomed to hunting for them on May 2 and keeping, fattening, and eating them; of a great many of them dying from “a cold snap” that came suddenly after a January thaw some years before (*Journal 8*, pp. 297-298).

About two weeks later, in the September 8 entry, Thoreau records a conversation with Garfield, who told him more mud turtle stories. Garfield revealed in the weight and size of the two mud turtles he had caught and other big ones he had seen; he also referred to “the years not long since when so many were found dead” and described one--“as big as a tray”--“rotting right on that shore” where they were (*Journal 9*, September 8, 1854). Nearly a year and a half later, Thoreau talks to Garfield again and records in his Journal for February 8, 1856, a vivid, more detailed account of Garfield catching the two giant mud turtles: Garfield “heard a loud sound & saw and caught there 2 great mud turtles”. One “had got the other by the neck--& their shells were thumping together--& their tails sticking up”. Garfield “caught one in each hand suddenly, & succeeded in getting them into the boat . . . paddled to nearest shore--pulled his boat up with his heel--& taking a tail in each hand walked backward through the meadow in water a foot deep, dragging them” (*Journal 10*, February 8, 1856).

The mud turtle series casts a side light on Thoreau's social relationships as represented in the Journal: Thoreau had frequent conversations with a large network of local hunters, trappers, fishermen, and farmers on wide-ranging topics related to natural history. His active pursuit of local knowledge yields a rich web of information, and sifting through this information not only broadens Thoreau's own knowledge of diverse subjects but also helps him deepen his understanding of various natural phenomena in historical and environmental contexts.

Comparing the use of a spy glass to that of a gun, Thoreau wrote, "You can identify the species better by killing the bird--because it was a dead specimen that was so minutely described--but you can study the habits & appearance best in the living specimen" (*Journal 6*, p. 48). As a naturalist, Thoreau was most interested in studying living specimens, and he rarely studied elements of nature in isolation. He preferred to study living animals, plants, insects, birds, fish, along with other natural events and phenomena--the formation of ice crystals and sand foliage, the freezing and thawing of rivers, the pattern and path of a fox's tracks--in their living environments, approaching nature as a whole governed by complex relationships among and between plants, animals, and humans within a particular environment--weather, climate, water, soil, land forms, and topography.

As Thoreau saunters through Concord and nearby areas, he sees turtles and tortoises everywhere. He finds them motionless or slowly moving in the meadow, the ditch, the pond, and the bottom of the river. He notices wood turtles "full & hard with eggs" and counts "half a dozen dead yel. spot turtles about Beck Stow's" (*Journal 8*, p. 96). He follows and measures their tracks on sand near water. He spots and opens the nests of turtles and tortoises, watches painted tortoises digging in the sand or gravel to prepare to lay eggs, examines turtle and tortoise eggs buried in the desert, and observes the young from the time of hatching. He is definitely fascinated by these creatures.

But he is equally intrigued by how they live in the environment, how that environment affects their lives, and how the turtles, in turn, affect the environment they inhabit. Painted tortoises fight with each other in the river, their shells striking together. They prepare to lay eggs “on the Southerly sides of hills & banks near the river” but “stop instantly & draw in their heads & do not move till you are out of sight--& then probably try a new place (*Journal 8*, p. 177). Stinkpot turtles climb “2 or 3 feet up the willows & hang there” while painted turtles sun or tumble off “the little hummocks laid bare by the descending water--their shells shining in the sun” (*Journal 8*, p. 126). Skunks suck through the shells of tortoises, leaving curled fragments behind. Stinkpot turtles eat frogs, and bugs devour dead painted tortoises.

Whether he was observing alone or talking to others, Thoreau paid close attention to elements that bear on the lives of turtles. When he narrated the stories others told him of the death of a great number of mud turtles at one time, he was careful to record in detail their slightly different interpretations of the cause of death. Of Miles’s story, he wrote on August 26, 1854, “Some years ago--in a Jan. thaw many came out on the Sudbury meadows & a cold snap suddenly succeeding--a great many were killed” (*Journal 8*, p. 298). Eighteen months later, he recorded in the *Journal* that Garfield and several other fishermen all “referred to the time when . . . Some 40 were found dead on the meadows between there & Sudbury--” and reported their competing interpretations of the cause: “It was almost the end of March & Puffer inferred that they had come out thus early *from the river* & the water going down the ice had settled on them & killed them--but the Garfields thought that the ice which tore up the meadows very much that year--exposed them & so they froze-- I think the last most likely” (*Journal 10*, February 8, 1856).

How turtles behaved in different weather conditions intrigued Thoreau. He placed a sieve over a little stinkpot turtle that had come out on September 9, 1854, and noticed that it “remained in

the hole it had made mostly concealed the 2 rainy days--", just as the little snapping turtle of September 2 "lay buried in the mud all day" in the cold rain (*Journal 9*, September 11, 1854). In the *Journal* entry for May 10, 1854, he reported his conversation with Rice about the best season and weather condition for hunting mud turtles: "You go a little later in this month--a calm forenoon when the water is smooth--& 'the wind must be south'--& see them on the surface-- Dea Farrars meadow in time of flood (I had come through this) was a good place" (*Journal 8*, p. 112). In the January 11, 1856, entry, he compared fish, frogs, and mud turtles in respect to their resistance to cold: the "fish is a tender animal in respect to cold"; frogs, perhaps "equally tender, and must (?) come to the air occasionally," are "therefore compelled go into the mud & become dormant"; even "the tough mud turtle possesses a southern constitution": he "would snap in vain--& soon cease snapping at the N. W. wind when the thermometer is at 25° below zero--". In this respect, "[wild] mice & spiders & snow fleas would be his superiors" (*Journal 10*, January 11, 1856).

Thoreau particularly attuned himself to physical locations, seasonal norms, and surroundings. Where and when did he see turtles and their eggs? How do they behave at different times of year? When he opened the snapping turtle nest on June 18, he noted its location and surroundings: "It is perhaps 5 or 6 rods from the brook--in the sand near its edge. The surface had been disturbed over a foot & a half in diameter--& was *slightly* concave. . . . & the surrounding sand was quite firm." Similarly, he noted the difference in the eggs' color and appearance relative to their position in the nest: "a little more than one half of each was darker colored (prob. the lower half) & the other white & dry looking" (*Journal 8*, p. 208). He remembered his neighbor Garfield's story about finding two mud turtles while digging a ditch in a meadow, particularly recalling Garfield's observation about the time when the turtles appeared: "he thought it was the last of September or first of October--and

that we did not see them put there put their heads out much later than this” (*Journal 9*, September 8, 1854).

No elements that make up the physical world the turtles and tortoises live in escape Thoreau’s attention. Observing these elements and collecting and sifting through all pieces of information give him a more complete understanding of the habits and behaviors of turtles and tortoises in particular circumstances. He estimates when turtles lay eggs and predicts how long it takes them to hatch. He learns when turtles begin to stir in the river and when they retreat to their winter quarters. He discovers at what season wood tortoises are “particularly attracted to the water” (*Journal 8*, p. 284) and whether stinkpot turtles “appear first about the same time with the snapping turtles” (p. 126). He knows that the best season for hunting mud turtles is May, when “the water is warmer--before the pads are common & the water is getting shallow on the meadows” (p. 129). He learns, in short, to decipher the mysteries of “turtledom” and its place in the larger natural world around it. The earth, after all, “is the mother of all creatures--” (*Journal 9*, September 9, 1854).

The “characteristic form” of Thoreau’s daily Journal entry, writes Patrick F. O’Connell, is his “journey into the surrounding world, not simply to collect data but to participate in the life around him” (Historical Introduction, *Journal 5*, p. 572). In his encounters with turtles, Thoreau is never a detached observer or a passive collector, but takes part in their lives in a very physical way. He scratches their backs, feels their scales, provides them with water and mud, opens their nests, and touches their eggs. On May 16, 1854, he struggled, with gusto, to take one snapping turtle up from the water: “On Hubbards meadow . . . saw a mid sized snapping turtle on the bottom-- managed at last after stripping off my coat & rolling up my shirt sleeve--by thrusting in my arm to the should to get him by the tail & lift him aboard” (*Journal 8*, p. 126). The next day, he got a larger mud turtle into his boat by the same method and “secured him with a lever under a seat”. He could

“get him from the landing to the house only by turning him over & drawing him by the tail--the hard crests of which afforded a good hold.” The turtle was so heavy, Thoreau reports, that “I could not hold him off so far as to prevent his snapping at my legs” (p. 127).

Thoreau participates in the turtle’s life in metaphorical and symbolic ways, too. In the summer of 1856, political events provoked him to contrast the peaceful, purposeful life of turtles with the turbulent, evil lives of men. During June, July, and August, the tortoise eggs were “hatching--a few inches beneath the surface in sandy fields--” while, “on the lit & airy surface 3 inches above them,” violence broke out in Kansas over slavery in the territories. “How many worthy men have died & had their funeral sermons preached--since I saw the mother turtle burry her eggs here.” Thoreau juxtaposes the tortoise’s natural, peaceful activity of hatching with the bloody, turbulent events of the human society that he disapproves of: while the tortoise “rests warily on the edge of its hole rash schemes are undertaken & fail.” Quietly and patiently minding their “private affairs,” turtles develop in their own time: “They contained an undeveloped liquid then, they are now turtles.” Unprincipled and acting in haste, men “despaired of the world--meditated the end of life--& all things seemed rushing to destruction.” Turtles follow their own slow pace because they have learned the “true value of time” and “nature has steadily & serenely advanced with a turtle’s pace--”. Turtles “have seen no berries had no cares-- Yet has not the great world existed for them as much as for you?” We should, Thoreau admonishes, “Consider the turtle” (*Journal 11*, August 28, 1856).

After an inactive winter, turtles begin to stir, and Thoreau is on the alert for those first stirrings--harbingers of spring. His February 23, 1857, Journal entry contains a lyrical celebration of the act of beholding: “What mean these turtles--these coins of the muddy mint issued in early spring--! The bright spots on their backs are vain unless I behold them. The spots *seem* brighter than

ever when first beheld in the spring. as does the bark of the willow. I have seen signs of the spring-- I have seen a frog swiftly sinking in a pool--or where he dimples the surface--as he leapt in-- I have seen the brilliant spotted tortoises! stirring at the bottom of ditches-- I have seen the clear sap trickling from the red maple” (*Journal 11*, February 23, 1857). To behold the first stirrings of a tortoise is to celebrate the source of life within himself.

If Thoreau finds regeneration in the slow hatching of tortoise eggs and locates the source of life in the turtle’s early spring stirrings, he sees the mystery of life itself in the shell of a dead snapping turtle. In late August 1854, he brought home with him the snapping turtle shell that Marshall Miles had given him and put it under the table next to his bed. That night he dreamed of snapping turtles--the ones he had seen and heard of--but, upon awakening the next morning, was in doubt “whether it was a dream or reality.” The first object he saw when he opened his eyes was the “great mud turtle shell lying bottom up”. The “empty mud-turtle’s shell,” once an “infant in its egg,” still “carries the earth on its back,” but at the same time it symbolizes mother earth, large enough to contain all the turtles of the world. Awed by its powerful presence, Thoreau asks, “Will it not make me of the earth earthy? or does it not indicate that I am of the earth earthy?” (*Journal 8*, p. 300). The shell evokes the mud of the earth, in which the mud turtle lives; it may have also reminded Thoreau of the lesson he learned on Ktaadn, that the physical body, the part actually connected to the earth, is just as powerful and mysterious as the spiritual part: “Talk of mysteries!-- Think of our life in nature,--daily to be shown matter, to come in contact with it,--rocks, trees, wind on our cheeks! the *solid* earth! the *actual* world! the *common sense*! *Contact!* *Contact!* *Who* are we? *where* are we?” (*The Maine Woods*, p. 71).

Thoreau’s attention over many years to the snapping turtle’s life in the muddy bottom of meadows and ditches demonstrates his characteristic approach to natural phenomena: preferring to

study living specimens in living environments, he observed, examined, measured, weighed, compared, and drew factual conclusions with the precision and objectivity of a scientist, and he described the beauty and significance of what he observed with the skill and passion of a poet. Thoreau's Journal is filled with such accounts of nature's inhabitants and events: animals (muskrats, moose, partridges, ducks, hawks, mice), plants and organisms (trees, shrubs, flowers, berries, lichens, fungi, catkins), birds (blue bird, redwing, pine warbler, robins), fish (sucker, minnow, pickerel), insects (beetles, ants, moths, spiders), and seasonal occurrences (seeds germinating, leaves falling, river falling and rising, ponds freezing and thawing). He observes each of these with a curious and disciplined eye and sees beauty and wonder in the most ordinary and plain. April rains fill "unsightly holes where rocks have been dug & blasted out" with "water of crystalline Transparency," making them "charming" wells, at whose bottom "even the decaying leaves & sticks" beg for admiration (*Journal 11*, April 24, 1856). Ripe poke stems in late August are "the emblem of a successful life--a not premature death" and he drinks their "deep rich purple" with his eyes (*Journal 7*, August 23, 1853). In October, the "ground is all parti-colored" with fallen leaves: "How beautiful they go to their graves--how gently lay themselves down--& turn to mould! Painted of a thousand hues and fit to make the beds of us living." The leaves "stoop to rise--to mount higher in coming years by subtiler chemistry.--" They "teach us to how to die" (*Journal 7*, October 22, 1853).

For Thoreau, nature is a set of phenomena to be understood and appreciated, not a commodity to be exploited. In a Journal entry for November 1, 1853, a little over a month after his return from a trip to the Maine woods, he makes a passionate plea for the "truest use" of nature. He laments the coarse pursuits and tastes of men, who come to the woods with an axe or a rifle, who "are content to behold" the pine "in the shape of many broad boards brought to market & deem that

its true success--". He disapproves of men's "petty & accidental uses" of nature: "Can he Who has only discovered the value of whale bone & whale oil be said to have discovered the true uses of the whale? Can he who slays the elephant for his ivory be said to have seen the elephant?" Everything, he contends, "may serve a lower as well as higher use." The highest use of the pine is to let it stand so that we can see how it "lives & grows & spires--lifting its evergreen arms to the light--to see its perfect success". The truest use of nature, then, is to love its immortal, "living spirit" (*Journal* 7, November 1, 1853). These beautiful passages, first written in the *Journal*, were later revised for inclusion in "Chesuncook," the middle section of *The Maine Woods* (pp. 121-122).

Most people know Thoreau through the books he wrote and published, most notably *Walden*. Many also know his political essays on civil disobedience, slavery, and John Brown. Yet his *Journal* is the major written work of his life, and many literary critics, cultural historians, and Thoreau enthusiasts now recognize the *Journal* as his most important imaginative work, as well as an invaluable record of the cultural, social, economic, and natural history of Concord and of New England in his time.

Yet no complete edition of Thoreau's work contains all of his *Journal*, and the text of the *Journal* that is available bears little resemblance to the manuscript. A new, definitive edition of Thoreau's works, however, is under way. Before I tell you about it, let me give you some background information about the publication of Thoreau's works.

At his death in 1862, Thoreau had published two books, *A Week on the Concord and Merrimack Rivers* and *Walden*, and a number of essays and poems. Five other books (*Excursions*, *A Yankee in Canada with Anti-Slavery and Reform Papers*, *The Maine Woods*, *Cape Cod*, and *Letters to Various Persons*) were published posthumously during the 1860s, edited by Thoreau's sister Sophia and several of his friends--Ralph Waldo Emerson, William Ellery Channing, and Franklin

Benjamin Sanborn. The well-meaning editors sometimes misunderstood Thoreau's intentions and sometimes had agendas of their own, and the texts of these posthumous books did not accurately represent Thoreau's intentions.

The first collected edition of Thoreau's works, the Riverside Edition, appeared in fall 1893, with a publication date of 1894. Six volumes reprint the earlier versions of Thoreau's books, essays, and poems; four, containing excerpts from his Journal selected by H. G. O. Blake, had originally appeared in print between 1881 and 1892. *Familiar Letters*, published separately in 1894, was later added to the set. In 1906, the Walden Edition came out in twenty volumes. This edition included in six volumes the books, poems, letters, and most of the essays in the 1894 edition, but instead of the seasonal volumes of Journal excerpts, it offered fourteen volumes of Thoreau's Journal, characterized then as "complete." More recent editions of some of Thoreau's works are also available, but, like the earlier editions on which they are based, they are inadequate or incomplete. It was not until the establishment in 1966 of *The Writings of Henry D. Thoreau*, or the Thoreau Edition, that the textual, historical, and biographical context necessary to an accurate and complete edition began to be constructed.

The goal of the Thoreau Edition is to produce a complete, definitive, and annotated edition of all of Thoreau's writings, including his published works, his Journal, and his correspondence. Supported by the National Endowment for the Humanities (during most of the project's existence) and the National Trust for the Humanities (in recent years), the project has had four institutional homes: State University of New York at Geneseo (1966-1972); Princeton University (1972-1983); University of California, Santa Barbara (1983-1999, 2005-present), and Northern Illinois University (1999-2005). Princeton University Press (PUP) publishes all of our books.

We have thus far completed and PUP has published fourteen volumes: seven of Thoreau's writings and seven of the Journal. The volumes containing material Thoreau published or intended to publish include four books, two collections of essays, and one collection of translations. The Journal volumes published so far cover almost all of Thoreau's Journal in the first eleven years, beginning with the elliptical entry for October 22, 1837: "'What are you doing now?' he asked. 'Do you keep a journal?' -- So I make my first entry to-day.'" With the forthcoming publication of *Excursions* (2007), a collection of travel and nature essays, our work will be complete on all of the volumes of writings except *Poems* and the late, unfinished nature essays, projected to fill two volumes. Of the other remaining twelve volumes to be completed (four are in various stages of production), three will be volumes of Thoreau's correspondence and nine will be Journal volumes. Obviously, we will be focusing primarily on the Journal over the next decade and more.

Thoreau's Journal evolved through several distinct stages. During the earliest stage (1837-1842), when he was a journeyman writer, Thoreau filled his Journal with many excerpts from his reading, particularly from Greek and Roman classical writers. He also copied down his poetry, reported aphorisms, meditated on themes such as friendship and truth, and, occasionally, worked on materials for lectures and essays. What most distinguishes the Journal of this period, however, is the fact that it consists of a transcription by Thoreau, made some time in 1840, of two original Journal volumes. Only a few leaves from the first volume and Thoreau's incomplete indexes to both volumes have survived. Although the indexes provide some information about the content of the original volumes, we do not know how Thoreau's transcription compares with what he was copying from, nor do we know what prompted him to undertake the transcriptions.

As Thoreau matured as a writer, the purpose of his Journal shifted. Between 1842 and 1849, he used his Journal primarily to compose drafts of literary works: lectures for the Concord Lyceum;

essays for the Transcendentalist magazine, the *Dial*, and other publications; and passages for his first two books, *A Week on the Concord and Merrimack Rivers* and *Walden*. (He completed his first book while living at Walden.) The first stage of Thoreau's work on a lecture or essay often involved revising passages in the Journal and then excising the leaves containing the revised material so he could add them to his draft of the lecture or essay. Most of these leaves have not survived. However fragmentary, though, the Journal for this period remains an important record of Thoreau's literary activities.

The third major shift in the purpose of the Journal came around 1850, when Thoreau began to devote his Journal entries to detailed observations of seasonal phenomena--the leafing of trees and shrubs, the blossoming of flowers, the rise and fall of rivers, the thawing and freezing of ponds, the annual migration of birds. Not only did the content of the Journal change from its earlier phases, but Thoreau also began to practice a new form of journal-keeping: he took field notes during his daily afternoon excursions in the woods and later expanded these notes into detailed, dated, and regularly kept Journal entries, a pattern he continued until the end of the Journal.

As his study of New England's fauna and flora intensified, Thoreau began using a new method for more precise notations of botanical processes. Starting in 1852, after noting a plant blooming or berries ripening, he sometimes put a single, double, triple, or even quadruple "X" next to the notation, as in "Woodbine berries purple. X" (*Journal 9*, September 3, 1854), "The checker berries are just beginning to redden XXX" (*Journal 9*, September 6, 1854), or "Columbine just out XXXX" (*Journal 9*, April 30, 1855). In June and July 1852, Thoreau gave some explanation of this notation system: one "X" means "to be observed in good season" or "[those] observed in very good season"; two "X"s means "very early" or "rather early" (*Journal 5*, pp. 131, 252). We don't really know what Thoreau meant by "good season," beyond our assumption that the number of "X"s

indicates the condition of a plant when he observed it relative to some seasonal norm. Thoreau might have devised this system himself or adopted it from one of the botany books he used as a source. We would be happy to learn more about this!

Given the importance of Thoreau's Journal as a record of his development as a writer and a naturalist, the 1906 edition of the Journal, an impressive achievement at the time, is inadequate to today's needs. Available in several reprintings and still used by many readers and scholars, particularly for material not yet published in the Princeton Edition, it is incomplete, representing three-fifths of the Journal for 1837-1842, merely a fifth for 1843-1850, and four-fifths for 1851-1861. Instead of presenting a text faithful to what Thoreau actually wrote, the editors of the 1906 edition followed conventional editorial rules of the time and made decisions on the basis of personal preferences. They standardized punctuation and capitalization, provided running heads from Thoreau's indexes or created them from the content of the material on the page, and left out many of his detailed botanical observations and all of his "X"s. When Thoreau had revised a passage, they accepted or rejected the revision based on whether the revised version appeared in Thoreau's published works. When Thoreau supplied two alternate words (one on the line and the other interlined above or with a caret) but did not indicate his choice by cancelling one of them, as in the case of "brightens" vs. "burnishes" and "islands" vs. "islets", they chose the one they liked better.

In short, the 1906 edition introduced Thoreau's Journal to the public but substantially altered what Thoreau had written. The editors treated Thoreau's Journal as though he had intended it for publication, and their concern was to polish it for the market. They made many decisions to make the text read more smoothly, without any explanation or consistently applied policy.

The Thoreau Edition's goal is to present a text of Thoreau's Journal as Journal--in its entirety and, to the extent that we can, in its form as Thoreau wrote it. To demonstrate how we

accomplish this goal, I have made JPG files of material from the September 8, 1854, entry of Thoreau's Journal. These files contain the same material as it appears in four sources: a) manuscript volume, pp. 23-24; b) unmarked transcript, pp. 23-24; c) marked ribbon copy, pp. 23-24; and d) the 1906 edition, 7:26-27. This material will be printed in the Princeton Edition of *Journal 9*, edited by Wesley T. Mott of Worcester Polytechnic Institute and Laura Dassow Walls of the University of South Carolina.

Let's first compare the manuscript copy ("1_MS p. 23" and "1_MS p. 24") with the transcript before it is reviewed and marked ("2_Transcript p. 23" and "2_Transcript p. 24"). The transcript, created from a copy of the manuscript, has been proofed twice, first by the person who transcribed it and then by a graduate student working at the Thoreau Edition. What you see is a literal transcription of the two manuscript pages: the transcript replicates the manuscript to the extent that typography allows. In other words, the transcriber matches Thoreau's text line for line, word for word, and element for element, including misspellings, and sets up the transcript so that lines and pages end where they do in the manuscript. The transcript also includes the transcriber's footnotes: usually these notes indicate the transcriber's uncertainty about a reading (e.g., "'when' possibly 'where'") or a revision (e.g., "'brown' possibly added in margin"); they also explain textual features that cannot easily be reproduced in type (e.g., "apple: second 'l' inserted").

Before we compare the unmarked transcript ("2_Transcript p. 23" and "2_Transcript p. 24") with a copy of the marked ribbon copy ("3_Marked RC p. 23" and "3_Marked RC p. 24"), I need to describe how the transcript becomes what we call the ribbon copy and what the editors and Thoreau Edition staff do to the ribbon copy.

Editors begin their work on a volume by reading a printout of the transcript against a copy of the manuscript and recording their decisions on the printout. That particular copy of the printout

then becomes the ribbon copy, the copy of record on which all further corrections and decisions will be marked, and against which all future proofreading will be done.

The editors correct transcription errors and misreadings, and position within the text material that Thoreau added in the margin or interlined above without a caret. They decide which of Thoreau's revisions and additions should be included in the Journal text as alterations (those judged to be current, made at the time Thoreau was writing in the Journal or within a few days of his original composition) and which should be excluded as later revisions (those judged to have been made later). They determine which elements call for emendation (changes editors make to the Journal text and resolutions of ambiguous manuscript features). Editors also write textual notes to explain significant manuscript features and editorial decisions. They record all their decisions on the ribbon copy in colored pencil: blue for editorial decisions, green for corrections of mistranscriptions, red for comments or questions for co-editors or the Edition office. In the margin of the page, they write abbreviations to indicate an entry in one of the apparatus lists: "AL" for alterations, "EM" for emendations, "LR" for later revisions, and "TN" for textual notes. The initial lists of alterations and later revisions are prepared by the Edition office; the editors review them and construct the lists of emendations and the textual notes.

In doing all of this, the editors establish the Journal text and finalize the apparatus lists. In particular, in making the distinction between alterations and later revisions and determining what elements will be emended, they establish the text of the Journal as Journal. This can be a rather complex process. Clearly stated editorial principles and policies are helpful, but some situations require special consideration, and applying established policies consistently within a volume and across volumes is a major challenge.

I can give you several examples of how we make exceptions to the rule that governs distinguishing between alterations and later revisions and how we modify previously established policies. The first example concerns material written in pencil. Thoreau wrote his Journal in ink and revised it in both ink and pencil, and our policy is to treat a penciled revision as a later revision because it was made in a different medium. However, when Thoreau corrects his own errors in pencil, we generally accept his correction: we emend the text to read as he revised it and report the decision in the emendations list. Two other, more complicated examples involve Thoreau's revisions in ink. We accept ink revisions Thoreau made as he was writing, but when evidence is clear that Thoreau made ink revisions at a later time, for use in lectures and other writings, we do not include them in the reading text of the Journal but instead report them as later revisions.

Thoreau often wrote several days' worth of dated entries in one sitting, and, in recording phenological observations in a dated entry, he often cross-referenced another dated entry, either prior to or after the current entry. Many of these cross-references were added, in ink or in pencil, either above the line or in the margin. In cases where such a revision is made in ink and cross-references an entry that follows it in the Journal, we modify the general editorial policy for treating ink revisions as current and penciled revisions as later: when an added cross-reference reporting botanical or seasonal information is written in ink and references an entry no more than five days forward, it is treated as current and reported as an alteration; when it references an entry more than five days forward, it is excluded from the text of the Journal and reported as a later revision.

When they complete editorial work, the editors send a photocopy of the ribbon copy to the Thoreau Edition office for review. In the last few months, I have been reviewing material submitted by the editors of *Journal 9*. I repeat what the editors have done, but from the vantage point of knowing much more than they do about how we have applied our editorial principles to earlier

Journal volumes. I proofread the ribbon copy against a copy of the manuscript, correcting errors I find and compiling a list of items that should be checked against the original. I look at every mark the editors have made on each page and check the manuscript for accuracy when necessary. I answer the editors' queries and revise their decisions when these decisions are incorrect. I also review the entire apparatus, deleting and adding items as needed and standardizing the language of the reports. In this extensive review, new questions come up, and I discuss and resolve them with Beth Witherell, the project's editor-in-chief. The revised files--the copy of the ribbon copy and the electronic apparatus files--then go back to the editors for another round of review. At some stage in this process, an editor or someone from the Edition office will read the transcript against the original manuscript in its entirety at the Morgan Library and Museum in New York City.

The copy of the ribbon copy you see is the black-and-white photocopy made from the color original. The marks you see on the copy reflect three separate readings: the *Journal 9* editor Laura Walls read it once against a copy of the manuscript; I read it twice, once against a copy of the manuscript and once against the original at the Morgan Library.

Let me note just a couple of things Laura and I did in our separate readings. On pp. 23-24, the transcription reads: "That {L.} in Hubbards swamp--which I have called *virgata* like--which has been out about a week & which I will call the Hub swamp L. is quite peculiar." Laura corrected the transcriber's "L." to "S." in two instances. She made the correction partly by comparing the appearance of the letter in the two instances (the letter on p. 24 looks much more like Thoreau's habitual capital "S" than that on p. 23) and partly by tapping her own botanical knowledge and consulting available resources: Ray Angelo's "Botanical Index to the Journal of Henry David Thoreau" provides a comprehensive and systematic list of plant names used by Thoreau in his Journal. "*Solidago virgata*" is listed there: Thoreau had used it once in an earlier Journal volume.

I changed “hummock” to “humock” and “distinguished” to “distingued.” That’s what Thoreau wrote in each case. But should we emend these two words to their correct forms, as the 1906 edition does? Here we need to think about our goals and the editorial principles we have established for the Journal: we aim to produce a version of the text that is as close as possible to what Thoreau wrote, and we follow a very conservative emendation policy; that is, we will not correct Thoreau’s errors of fact, spelling, and grammar unless they seriously impede understanding or mislead the reader. As that’s not the case with the two misspelled words, we will let them stand. For “humock,” we have an additional reason for not emending: standardization of spelling evolved slowly and was not complete in Thoreau’s time. In fact, many eighteenth- and even nineteenth-century writers spelled the same word in different ways.

When I examined the original manuscript, I saw that Thoreau had drawn a horizontal line in pencil through “which I have called virgata like”. The cancellation line was so faint that it does not show on the copy of the manuscript. (Every trip to the Morgan Library yields discoveries like this, making the reading against the original absolutely necessary.) This revision will not change the printed text: we will print the material as part of the Journal text but report the cancellation in the later revisions list. I marked the copy of the ribbon copy to reflect this decision.

Now I want to compare the ribbon copy (“3_Marked RC p. 23” and “3_Marked RC p. 24”) as is (it will continue to change as we resolve questions) and the 1906 version (“4_1906 pp. 26-27”). Here, the most significant difference is 1906’s omission of an entire paragraph, one which contains a passage discussed above:

That S. in Hubbards swamp--which I have called virgata like--which has been out about a week & which I will call the Hub swamp S. is quite peculiar-- It is smooth & has an erect narrow wandlike compound & dense raceme--about 14 to 17 rayed heads-- -- Leaves very entire thin peculiarly elliptic (?) lancolate & pointed at both ends--not triple veined--only the lower slightly serrate--spatulate lanceolate with long slender

partly clasping winged petioles.

The Editor's Preface for the 1906 Journal provides a long list of categories of material omitted from that edition. Two of them concern botany: "a few long lists of plants, etc., recapitulating matter contained in the preceding pages" and "guesses at the identification of particular plants,--willows, goldenrods, and the like,--often accompanied by tediously minute technical descriptions, the whole evidently meant as mere memoranda for the writer's future guidance, and believed to be of no interest now, even to the botanical reader" (<<http://www.walden.org/Institute/thoreau/writings/Writings1906/07Journal01/Introductory%20Materials.pdf> >). Although neither precisely describes this paragraph, the editors clearly believed that the material had no relevance or appeal even to the botanically inclined reader.

You might ask--how valuable could a single passage of botanical observations be, especially when a wealth of such passages fill Thoreau's Journal? Ray Angelo, in his preface to "Botanical Index to the Journal of Henry David Thoreau," provides an excellent answer. "For those who approach Thoreau primarily as social critic, poet, philosopher, or prose writer his preoccupation in the *Journal* with Concord's flora is only so much chaff to be winnowed out. But for others who approach Thoreau as naturalist or who seek the whole Thoreau this 'chaff' is just as wholesome as the grain." If our interest is to follow Thoreau on his daily trek through woods, meadows, and swamps, in all kinds of weather, throughout the year, we need each detail; if our purpose is to put together the natural history of Concord and nearby areas as Thoreau saw it, we need each detail. As Angelo points out, Concord's flora "comprises a large proportion of the flora of New England which in turn comprises a large proportion of the flora of the northeastern United States." Thoreau's Journal, when presented in its entirety and as he wrote it, can be a road map for historical ecologists

and environmental historians to “gauge the abundance or scarcity of a multitude of species for eastern Massachusetts in the 1850s” (<<http://neatlas.huh.harvard.edu/ThoreauBotIdx/Preface.html>>).

Now let’s take a paragraph the 1906 does print and list the differences between the two editions.

| Ribbon Copy | 1906 |
|--------------------|---------------------|
| muskrat cabin | muskrat-cabin |
| ap. | apparently |
| humock | hummock |
| core. Now | core, now |
| 1st | first |
| & | and |
| has | had |
| about | about. |
| mouth fulls-- | mouthfuls |
| river bottom fine | river-bottom,--fine |
| pontedrias-- | pontedrias, |
| sium-- | sium, |
| fontinalis | fontinalis, |
| &c &c | etc., etc., |
| decayed--but | decayed but |
| still-- | still. |
| 10 ducks which | ten ducks, which |
| bath-place-- | bath place, |
| ap-- | apparently |

These differences are representative of the kinds of regularization the 1906 editors imposed on the text of Thoreau’s Journal. They are of a different nature from the omission of sentences or paragraphs, but they nonetheless contribute to a distorted picture of Thoreau as a naturalist and of his Journal as a private document. By correcting errors of spelling and grammar, spelling out abbreviations, standardizing the form of compound words, and applying conventional rules for punctuation and capitalization, the 1906 version makes the Journal seem to be a far more finished, polished document than it was, and sacrifices the intimacy that existed between the author and what he wrote and the spontaneity the author felt in the act of that writing.

Further, it imposes a distance between how Thoreau actually experienced nature and how the Journal makes us see him experience it: Thoreau stands in a meadow or a swamp, looking around him; he sees something (a new variety of a plant or a change in a plant he has been observing); he takes some quick notes that he later expands into Journal passages, revising as he goes along. The 1906 version, with correct usage and often arbitrarily arranged paragraphs, creates an order and a finished quality that misrepresents the experience Thoreau had when he observed Concord's nature, as well as the experience he intended to convey when he wrote his observations in the Journal. Thoreau took great care in recording his observations in the Journal, but he was not concerned about the kinds of things that would have concerned him had he been writing for publication. For him, the Journal was a private record of daily observations of natural events and phenomena, a document to be used by himself for his own purposes.

One of Thoreau's purposes, as the Journal manuscripts reveal, was to use information he recorded in the Journal for a large natural history project that he began some time in 1851, concurrent with the gradual shift in the content and focus of his Journal. The outcome of this project, probably created in 1859, consists of lists and charts for seasonally recurring natural phenomena in Concord. Beth Witherell has studied these and has given several lectures about them. The lists are "usually in chronological order and arranged by year or season" (Witherell, "The Thoreau Edition at NIU," p. 17). The titles clearly describe the contents ("All Phenomena for January," "Earliest Flowering of April Flowers," "Growth Leafing &c &c for May"), and in most cases the events are recorded chronologically by day. The charts "are like phenological databases: they bring together information about certain phenomena and present it year by year, so that general patterns are allowed to emerge." They are "arranged with years across the top and natural events down the side, and the variations of the event--date of onset or intensity, for example--noted for each year in the

appropriate box” (Witherell, “‘The Book of Concord’: Henry David Thoreau’s Natural History, pp. 9, 12). One such chart, for example, is called “Insects” and covers the period 1850-1854.

Witherell believes that Thoreau began collecting information about seasonally recurring events or phenomena well before he came up with the idea of organizing the information in lists and charts. His method of indicating the information he judged to be important is shown in the passage below, written in October 1852. He marked lines containing information of interest with a pair of angled lines in the margin of the manuscript volume.

Oct 3d Pm to Flint’s P.

odes

// I hear a hyla (?) from time to time Shrub
 // oaks are red, some of them--
 // Hear the loud laughing of a loon
 on Flint’s--apparently alone in the
 middle. A wild sound heard far &
 suited to the wildest lake. Many
 // acorns strew the ground & have
 fallen into the water. Collected a
 parcel of grass? balls--some washed
 up high & dry--part of the shore
 line consists of the same material--from
 ½ inch to 4 inches diameter. The sand indicates
 that they are formed on the sandy
 shore. The partly decomposed rushes composed
 // of similar fibres {drawing} From Heywood’s
 Peak at Walden the shore is now more
 beautifully painted. The most prominent
 are the red maples & the del--yellowish
 // aspens. The aster undulatus is common
 // & fresh also the solidago nemoralis or Gray--
 // The pine fall is commenced--and the
 trees are mottled green & yellowish.

The list that contains information corresponding to that recorded in the above Journal entry is titled “General Phenomena for October & (fall of leaf).” The relevant section reads:

Hylodes heard 3d
 Loon on Flint’s Pond 3d (on Walden 8th)

and our country so that we can continue to find solace and inspiration in nature, as Thoreau did when he wrote on February 12, 1854: “Though you may perceive no difference in the weather--the pond does-- So the alligator & the turtle with quakings of the earth come out of the mud” (*Journal 7*, February 12, 1854).

Acknowledgments

Many descriptions of the Thoreau Edition are available in our grant proposals and on our Web site, < <http://www.library.ucsb.edu/thoreau/>>. I have synthesized information from these sources in describing the project’s history and the publication of Thoreau’s works.

In writing this paper, I have consulted the General Introduction to the Princeton Edition of Thoreau’s *Journal 1* and the Historical Introductions to several of the Journal volumes. These introductions were written by William L. Howarth, Robert Sattelmeyer, William Rossi, Leonard N. Neufeldt, Nancy Craig Simmons, Patrick F. O’Connell, Heather Kirk Thomas, and Sandra Harbert Petrulionis.

I have also browsed several of Beth Witherell’s lecture presentations about the Thoreau Edition’s work. In particular, my summary of Thoreau’s unfinished natural history project is derived from Witherell’s unpublished lecture, “The Book of Concord: Henry David Thoreau’s Natural History” (1997). Witherell has read the entire draft of the paper and provided extensive comments and suggestions for revision.

Ray Angelo’s “Botanical Index to the Journal of Henry David Thoreau” has provided useful information as well. Angelo is an associate of Harvard University Herbaria and curator of vascular plants for the New England Botanical Club.

Postscript

The Thoreau Edition is donating a set of the fourteen published volumes to the Nankai University Library. The volumes are currently in my possession (I am continuing my work on the Edition during this year in Tianjin) but will be given to the library at the end of my stay in Tianjin. They will be available for circulation and interlibrary loan some time after July.

The Thoreau Edition’s Web site, <<http://www.library.ucsb.edu/thoreau/>>, provides extensive information about Thoreau and the Transcendentalist movement. It includes a section called “Online Journal Transcripts,” which contains transcribed, unedited versions of Thoreau’s MS Journal for the period September 3, 1854, through April 7, 1859 (MS volumes 18-28). Manuscript volumes 29-33 will be added as we complete the transcription and proofreading. None of the

material included in this section has been published (and they are NOT edited), but they will form the basis for what will be *Journal 9* through *Journal 16* in the print version. Their appearance in an electronic format gives scholars and interested readers access to the only documentary version of the Journal that has ever been available.

The Thoreau Society is an organization whose members “represent a wide range of professions, interests, and hometowns across the United States and around the world. They are connected by the conviction that Henry Thoreau had important things to say and crucial questions to ask that are just as significant in our time as in his.” If you are interested in joining the Thoreau Society, please visit their Web site, <<http://www.thoreausociety.org/>>.