

VI

MAY, 1854

(ÆT. 36)

May 1. A fine, clear morning after three days of rain, — our principal rain-storm this year, — raising the river higher than it has been yet.

6 A. M. — Up railroad.

Everything looks bright and as if it were washed clean. The red maples, now fully in bloom, show red tops at a distance. Is that a black cherry so forward in the cow-killer? When I first found the saxifrage open, I observed that its leaves had been eaten considerably.

9 A. M. — To Cliffs and thence by boat to Fair Haven.

I see the scrolls of the ferns just pushed up, but yet wholly invested with wool. The sweet-fern has not yet blossomed; its anthers are green and close, but its leaves, just beginning to expand, are covered with high-scented, amber-like dots. Alder leaves begin to expand in favorable places. The viburnum (*Lentago* or *nudum*) leaves unexpectedly forward at the Cliff Brook and about Miles Swamp. I am not sure that I distinguish the *nudum* now, but suspect the other to be most forward. Snakes are now common on warm

banks. At Lee's Cliff find the early cinquefoil. I think that the columbine cannot be said to have blossomed there before to-day, — the very earliest. A choke-cherry is very strongly flower-budded and considerably leaved out there. The early rose is beginning to leaf out. At Miles Swamp, benzoin will apparently open to-morrow, before any leaves begin. The creeping juniper appears to be now just in bloom. I see only the female flower.

I sail back with a fair southwest wind. The water is strewn with myriads of wrecked shad-flies, erect on the surface, with their wings up like so many schooners all headed one way. What an abundance of food they must afford to the fishes! Now and then they try to fly, and fall on the water again. They apparently reach from one end of the river to the other, one to a square yard or two. The scleranthus is out and a tuft of that brownish-flowered kind of sedge.

P. M. — Up Assabet by boat to Cedar Swamp.

The earliest shrubs and trees to leaf have been thus far in this order: The earliest gooseberry (in garden and swamp), raspberries, thimble-berry (perhaps in favorable places only), wild red cherry (if that is one near Everett's),¹ meadow-sweet, (red currant and second gooseberry. I think, here), sweet-fern (but is *very* slow to go forward), *S. alba* (April 27), and also a small dark native willow, young black cherry (if that is one in the cow-catcher, and others are as forward), choke-cherry, young shoots, viburnum (am not sure if

¹ *Vide* May 5. It is.

Lentago is earlier than *nudum*; as both are leafing, put the *Lentago* first and *nudum* next), diervilla (if that light-stemmed plant on Island is it),¹ barberry (perhaps in favorable places only), and some young apples in like places, alders (in favorable places), early rose.

Saw two black ducks. Have seen no *F. hyemalis* for five or six days. Hear a golden-crested wren at Cedar Swamp. I think that I may have mistaken the note of the myrtle-bird for that of the creeper the other morning. A peewee, and *methinks* I have heard it a day or two.

I have seen Goodwin and Haynes all day hunting muskrats and ducks, stealthily paddling along the river-side or by the willows and button-bushes, now the river is so high, and shooting any rat that may expose himself. In one instance a rat they had wounded looked exactly like the end of an old rider stripped of bark, as it lay just on the surface close to the shore within a few feet of them. Haynes would not at first believe it a muskrat only six or eight feet off, and the dog could not find it. How pitiful a man looks about this sport! Haynes reminded me of the Penobscots.

Early starlight by riverside.

The water smooth and broad. I hear the loud and incessant cackling of probably a pigeon woodpecker, — what some time since I thought to be a different kind. Thousands of robins are filling the air with their trills, mingling with the peeping of hylodes and ringing of frogs [*sic*]; and now the snipes have just begun

¹ *Vide* May 5.

their winnowing sounds and squeaks, and I hear Barrett's sawmill beside; and whenever a gun fires, Wheeler's peacock screams.

The flowers of the larch which I examined on the 24th *ult.* have enlarged somewhat and may now certainly be considered in blossom, *though the pollen is not quite distinct.* I am not certain whether the 26th was not too early. The crimson scales of the female cones are still more conspicuous.

May 2. The cracks in the ground made by the frost last winter are still quite distinct.

It is the young black cherry which is so forward now.

May 3. P. M. — In rain to Nawshawtuct.

The river rising still. What I have called the small pewee on the willow by my boat, — quite small, uttering a short *chevet* from time to time. Some common cherries are quite forward in leafing; say next after the black. The *Pyrus arbutifolia*, of plants I observed, would follow the cherry in leafing. It just begins to show *minute* glossy leaves. The meadow-sweet begins to look fairly green, with its little tender green leaves, making thin wreaths of green against the bare stems of other plants (this and the gooseberry), — the next plant in this respect to the earliest gooseberry in the garden, which appears to be the same with that in the swamp. I see wood turtles which appear to be full and hard with eggs. Yesterday I counted half a dozen dead yellow-spotted turtles about Beck Stow's. There

is a small dark native willow in the meadows as early to leaf as the *S. alba*, with young catkins. *Anemone nemorosa* near the ferns and the sassafras appeared yesterday. The ferns invested with rusty wool (*cin-namomea*?) have pushed up eight or ten inches and show some of the green leaf.

May 5. P. M. — To Boiling Spring, Laurel Glen, and Hubbard's Close.

I observe the following plants, leafing in about this order, to be added to the list of May 1st: —

Elder has made shoots two or three inches long, — much more than any other shrub or tree, — but is not common enough to show. Possibly it should rank with or next to the gooseberry.

Mountain-ash, larger leaves now than any tree, and the first tree to show green at a little distance.

Cultivated cherry.

Pyrus arbutifolia.

Horse-chestnut.

Hazel just passing from buds to leaves.

Late gooseberry in gardens.

Early apples.

Probably pears.

Wild red cherry in woods.

Dwarf or sand cherry.

Hardhack.

Diervilla near Laurel Glen (comes on fast after this).¹

Low blackberry.

Some young red maple buds begin to expand.

Against the wall in front of young Farrar's house a scroll-shaped slender fern now three inches high; stem invested with narrow shining brown scales one third

¹ May 11, is *one* of the most forward of all.

of an inch long. The *Salix tristis* now out (not out May 1st), appeared the 3d. The same of the sweet-fern. The red maple keys are now about three quarters of an inch long (with stems). I see no leaves on black, red, or shrub oaks now, — their buds expanding and showing a green or yellowish point, — but they still hang on the white oak.

May 3d and 4th, it rained again, — especially hard the night of the 4th, — and the river is now very high, far higher than in any other freshet this year; will reach its height probably to-morrow.

Heard what I should call the twitter and mew of a goldfinch¹ and saw the bird go over with ricochet flight. The oak leaves apparently hang on till the buds fairly expand. *Thalictrum anemonoïdes* by Brister's Spring on hillside. Some skunk-cabbage leaves are now eight or nine inches wide near there. These and the hellebore make far the greatest show of any herbs yet. The peculiarly beautiful clean and tender green of the grass there! Green herbs of all kinds, — tansy, buttercups, etc., etc., etc., now make more or less show. Put this with the grassy season's beginning. Have not observed a tree sparrow for four or five days. The Emerson children found blue and white violets May 1st at Hubbard's Close, probably *Viola ovata* and *blanda*; but I have not been able to find any yet. *Salix alba*.

May 6. P. M. — To epigea via Clamshell Hill.

There is no such thing as pure *objective* observation.

¹ Yes, and for several days after.

Your observation, to be interesting, *i. e.* to be significant, must be *subjective*. The sum of what the writer of whatever class has to report is simply some human experience, whether he be poet or philosopher or man of science. The man of most science is the man most alive, whose life is the greatest event. Senses that take cognizance of outward things merely are of no avail. It matters not where or how far you travel, — the farther commonly the worse, — but how much alive you are. If it is possible to conceive of an event outside to humanity, it is not of the slightest significance, though it were the explosion of a planet. Every important worker will report what life there is in him. It makes no odds into what seeming deserts the poet is born. Though all his neighbors pronounce it a Sahara, it will be a paradise to him; for the desert which we see is the result of the barrenness of our experience. No mere willful activity whatever, whether in writing verses or collecting statistics, will produce true poetry or science. If you are really a sick man, it is indeed to be regretted, for you cannot accomplish so much as if you were well. All that a man has to say or do that can possibly concern mankind, is in some shape or other to tell the story of his love, — to sing; and, if he is fortunate and keeps alive, he will be forever in love. This alone is to be alive to the extremities. It is a pity that this divine creature should ever suffer from cold feet; a still greater pity that the coldness so often reaches to his heart. I look over the report of the doings of a scientific association and am surprised that there is so little life to be reported; I am put off with

a parcel of dry technical terms. Anything living is easily and naturally expressed in popular language. I cannot help suspecting that the life of these learned professors has been almost as inhuman and wooden as a rain-gauge or self-registering magnetic machine. They communicate no fact which rises to the temperature of blood-heat. It does n't all amount to one rhyme.

The ducks appear to be gone (though the water is higher than any time since that greatest of all rises, I think, — reached its height yesterday; the arches are quite concealed), swept by with the spring snow and ice and wind, though to-day it has spit a little snow and is *very* windy (northwest) and cold enough for gloves. Is not that the true spring when the *F. hyemalis* and tree sparrows are with us singing in the cold mornings with the song sparrows, and ducks and gulls are about? The *Viola ovata* this end of Clamshell Hill, perhaps a day or two; let it go, then, May 1st; also dandelions, perhaps the first, yesterday. This flower makes a great show, — a sun itself in the grass. How emphatic it is! You cannot but observe it set in the liquid green grass even at a distance. I am surprised that the sight of it does not affect me more, but I look at it as unmoved as if but a day had elapsed since I saw it in the fall. As I remember, the most obvious and startling flowers as yet have been the crowfoot, cowslip, and dandelion, so much of a high color against the russet or green. We do not realize yet so high and brilliant a flower as the red lily or arethusa. Horse-mint is an inch or two high, and it

[is] refreshing to scent it again. The *Equisetum sylvaticum* has just bloomed against Hosmer's gap.

It is the young shoots of the choke-cherry which are the more forward, — those which are not blossom-budded, — and this is the case with most trees and shrubs. These are growing while the older are blossoming. Female flower of sweet-gale how long? At Ministerial Swamp, the anthers of the larch appear now effete. I am surprised to find a larch whose female cones are pure white (not rose or crimson). The bundles of larch leaves are now fairly separating. Meadow saxifrage just out at Second Division. The cowslip now makes a show there, though not elsewhere, and not there as much as it will. There is a large and dense field of a small rush there, already a foot high, whose old and dead tops look like blossoms at a distance. The mayflower is in perfection. It has probably been out more than a week.

Returned over the hill back of J. P. Brown's. Was surprised at the appearance of the flood. Seen now from the same side with the westering sun, it looks like a dark-blue liquid like indigo poured in amid the hills, with great bays making up between them, flooding the causeways and over the channel of each tributary brook, — another Musketaquid making far inland. I see in the distance the light, feathery willow rows [?] on the causeway, stretching across it, the trees just blooming and coming into leaf, and isolated red-topped maples standing far in the midst of the flood. This dark-blue water is the more interesting because it is not a permanent feature in the landscape.

Those white froth lines conform to the direction of the wind and are from four to seven or eight feet apart.

Remembering my voyage of May 1st, and Goodwin and Haynes hunting, you might have passed up and down the river three or four miles and yet not have seen one muskrat, yet they killed six at least. One in stern paddling slowly along, while the other sat with his gun ready cocked and the dog erect in the prow, all eyes constantly scanning the surface amid the button-bushes and willows, for the rats are not easy to distinguish from a bunch of dried grass or a stick. Suddenly one is seen resting on his perch, and crack goes the gun, and over the dog instantly goes to fetch him. These men represent a class which probably always exists, even in the most civilized community, and allies it to the most savage. Goodwin said in the morning that he was laying stone, but it was so muddy on account of the rain that he told Haynes he would like to take a cruise out.

May 7. I have noticed the steel-colored, velvet-like lichen on the stumps of maples especially, also on oaks and hickories. Sometimes, where a maple grove has been cut down some years, every stump will be densely clothed with them.

Our principal rain this spring was April 28th, 29th, and 30th, and again, May 3d and 4th, apparently the settling storm of the season. The great source of freshets far and wide. I observed the swallows yesterday, — barn swallows and some of those white-bellied with grayish-brown backs, — flying close to the surface

of the water near the edge of the flooded meadow. Probably they follow their insect prey.

P. M. — To Cliffs.

The causeways being flooded, I have to think before I set out on my walk how I shall get back across the river.

The earliest flowers might be called May-day flowers, — if indeed the sedge is not too far gone for one then. A white-throated sparrow still (in woods). *Viburnum Lentago* and *nudum* are both leafing, and I believe I can only put the former first because it flowers first. Cress at the Boiling Spring, one flower. As I ascend Cliff Hill, the two leaves of the Solomon's-seal now spot the forest floor, pushed up amid the dry leaves. *Vaccinium-Pennsylvanicum* leafing. Flowers, *e. g.* willow and hazel catkins, are self-registering indicators of *fair* weather. I remember how I waited for the hazel catkins to become relaxed and shed their pollen, but they delayed, till at last there came a pleasanter and warmer day and I took off my greatcoat while surveying in the woods, and then, when I went to dinner at noon, hazel catkins in full flower were dangling from the banks by the roadside and yellowed my clothes with their pollen. If man is thankful for the serene and warm day, much more are the flowers.

From the Cliffs I again admire the flood, — the now green hills rising out of it. It is dark-blue, clay, slate, and light-blue, as you stand with regard to the sun. With the sun high on one side it is a dirty or clayey slate: directly in front, covered with silvery sparkles far to the right or north, dark-blue; farther to the southwest,

light-blue. My eyes are attracted to the level line where the water meets the hills now, in time of flood, converting that place into a virgin or temporary shore. There is no strand, — nothing worn; but if it is calm we fancy the water slightly heaped above this line, as when it is poured gently into a goblet. (How in the spring we value any smoothness, gentleness, warmth!) It does not beat, but simply laves the hills (already the peewee flutters and teeters along it a flight further back), submerging the blossoming flowers which I went to find. I see the sweet-gale deeply buried, and the *V. blanda*, etc., etc., and the *A. calyculata* and the cowslips. I see their deluged faces at the bottom and their wrecked petals afloat. I paddle right over Miles's meadow, where the bottom is covered with cowslips in full bloom; their lustre dimmed, they look up with tearful faces. Little promontories at Lee's Cliff, clothed with young pines, make into the water; yet they are rarely submerged; as if nature or the trees remembered even the highest floods and kept out of their way, avoiding the shore, leaving a certain neutral ground. Early strawberry just out. I found an *Amelanchier Botryapium*, with its tender reddish-green leaves already fluttering in the wind and stipules clothed with white silky hairs, and its blossom so far advanced that I thought it would open to-morrow. But a little farther there was another which did not rise above the rock, but caught all the reflected heat, which to my surprise was fully open; yet a part which did rise above the rock was not open. What indicators of warmth! No thermometer could show it better. The *Amelan-*

chier Botryapium leaves begin now to expand. The juniper branches are now tipped with yellowish and expanding leaf-buds; put it just before the larch. I begin to see cows turned out to pasture. I am inclined to think some of these are coarse, windy days, when I cannot hear any bird.

What are those small ferns under the caves of the rocks at the Cliffs, their little balls unrolling as they ascend, now three or four inches high? How many plants have these crimson or red stigmas? Maples, hazels, sweet-gale, sweet-fern. High blackberry leafing. The leaves are now off the young oaks and shrub oaks on the plain below the Cliffs, except the white oaks, which leaf later. I noticed it elsewhere, — first May 5th, when —, or a day or two before perhaps — they suddenly cast off their winter clothing; and the plain now appears thinly covered with gray stems, but in a short month they will have put on a new green coat. They wear their leaves almost all the year. The partridge and rabbit must do without their shelter now a little while. A ruby-crested wren by the Cliff Brook, — a chubby little bird. Saw its ruby crest and heard its harsh note.¹ The birds I have described as such were the same. Hellebore is the most noticeable herb now. Alders, young maples of all kinds, and ostrya, etc., now beginning to leaf. I observe the phenomena of the seashore by our riverside, now that there

¹ This was the same I have called golden-crowned; and so described by W[ilson], I should say, except that I saw its ruby crest. I did n't see the crest of the golden-crowned, and I did not hear this ruby-c. sing like the former. Have I seen the two?

is quite a sea on it and the meadow, though the waves are but eight inches or a foot high. As on the sea beach, the waves are not equally high and do not break with an equally loud roar on the shore; there is an interval of four or five or half a dozen waves between the larger ones. In the middle of the meadow, where the waves run highest, only the middle and highest parts of the waves are whitened with foam, where they are thinnest and yield to the wind apparently, while their broad bases are detained by union with the water; but next the shore, where their bases are much more detained by friction on the bottom, their tops for their whole length curve over very regularly like a snow-drift, and the water is evenly poured as over a dam and falls with foam and a roar on the water and shore. It is exhilarating to stoop low and look over the rolling waves northwest. The black rolling waves remind me of the backs of waves [*sic*; = whales?]. It is remarkable how cleanly the water deposits its wreck, now spotted with cranberries. There is a bare space of clean grass, perfectly clean and about a foot wide, now left between the utmost edge of the breakers and the steep and abrupt edge of the wreck. So much it has gone down. Thus perfectly the water deposits what floats on it on the land. The oak buds — black, shrub, etc., except white oak — are now conspicuously swollen. A spreading red maple in bloom, seen against a favorable background, as water looking down from a hillside, is a very handsome object, presenting not a dense mass of color but an open, graceful and ethereal top of light crimson or scarlet, not too obvious and staring, slightly

tingeing the landscape as becomes the season, — a veil of rich workmanship and high color against the sky, or water, [or] other trees.

At sunset across the flooded meadow to Nawshawtuct. The water becoming calm. The sun is just disappearing as I reach the hilltop, and the horizon's edge appears with beautiful distinctness. As the twilight approaches or deepens, the mountains, those pillars which point the way to heaven, assume a deeper blue. As yet the aspect of the forest at a distance is not changed from its winter appearance, except where the maple-tops in blossom in low lands tinge it red. And the elm-tops are in fruit in the streets; and is there not [a] general but slight reddish tinge from expanding buds? Scared up ducks of some kind.

May 8. A. M. — To Nawshawtuct.

A female red-wing. I have not seen any before. Hear a yellowbird in the direction of the willows. Its note coarsely represented by *che-che-che-char-char-char*. No *great* flocks of blackbirds on tree-tops now, nor so many of robins. Saw a small hawk flying low, about size of a robin — tail with black bars — probably a sparrow hawk; probably the same I have seen before. Saw one at Boston next day; mine was the pigeon hawk,¹ slaty above (the male) and *coarsely* barred with black on tail. I saw these distinct bars at a distance as mine flew. It appeared hardly larger than a robin. Probably this the only hawk of this size that I

¹ No; for that is barred with white. Could mine have been the *F. juscus* and so small?

have seen this season. The sparrow hawk is a rather reddish brown and *finely* and thickly barred above with black.¹ Missouri currant. I hear the voices of farmers driving their cows past to their up-country pastures now. The first of any consequence go by now.

P. M. — By boat to Fair Haven.

The water has fallen a foot or more, but I cannot get under the stone bridge, so haul over the road. There is a fair and strong wind with which to sail upstream, and then I can leave my boat, depending on the wind changing to southwest soon. It is long since I have sailed on so broad a tide. How dead would the globe seem, especially at this season, if it were not for these water surfaces! We are slow to realize water, — the beauty and magic of it. It is interestingly strange to us forever. Immortal water, alive even in the superficies, restlessly heaving now and tossing me and my boat, and sparkling with life! I look round with a thrill on this bright fluctuating surface on which no man can walk, whereon is no trace of footstep, unstained as glass. When I got off this end of the Hollowell place I found myself in quite a sea with a smacking wind directly aft. I felt no little exhilaration, mingled with a slight awe, as I drove before this strong wind over the great black-backed waves I judged to be at least twenty inches or two feet high, cutting through them, and heard their surging and felt them toss me. I was even obliged to head across them and not get into their troughs, for then I could

¹ Could the Boston pigeon hawk have been barred with black?

hardly keep my legs. They were crested with a dirty-white foam and were ten or twelve feet from crest to crest. They were so black, — as no sea I have seen, — large and powerful, and made such a roaring around me, that I could not but regard them as gambolling monsters of the deep. They were *melainai* — what is the Greek for waves? This is our black sea. You see a *perfectly black* mass about two feet high and perhaps four or five feet thick and of indefinite length, round-backed, or perhaps forming a sharp ridge with a dirty-white crest, tumbling like a whale unceasingly before you. Only one of the epithets which the poets have applied to the color of the sea will apply to this water, — *melaina, μέλαινα θάλασσα*. I was delighted to find that our usually peaceful river could toss me so. How much more exciting than to be planting potatoes with those men in the field! What a different world! The waves increased in height till [I] reached the bridge, the impulse of wind and waves increasing with the breadth of the sea. It is remarkable that it requires a very wide expanse to produce so great an undulation. The length of this meadow lake in the direction of the wind is about a mile, its breadth varying from a mile to a quarter of a mile, and the great commotion is toward the southerly end. Yet after passing the bridge I was surprised to find an almost smooth expanse as far as I could see, though the waves were about three inches high at fifty rods' distance. I lay awhile in that smooth water, and though I heard the waves lashing the other side of the causeway I could hardly realize what a sea I [had] just sailed through. It

sounded like the breakers on the seashore heard from *terra firma*.

Lee's Cliff is now a perfect natural rockery for flowers. These gray cliffs and scattered rocks, with upright faces below, reflect the heat like a hothouse. The ground is whitened with the little white cymes of the saxifrage, now shot up to six or eight inches, and more flower-like dangling scarlet columbines are seen against the gray rocks, and here and there the earth is spotted with yellow crowfoots and a few early cinquefoils (not to mention houstonias, the now mostly effete sedge, the few *Viola ovata*, — whose deep violet is another kind of *flame*, as the crowfoot is yellow, — hanging their heads low in the sod, and the as yet inconspicuous veronica); while the early *Amelanchier* *Botryapium* overhangs the rocks and grows in the shelves, with its loose, open-flowered racemes, curving downward, of narrow-petalled white flowers, red on the back and innocently cherry-scented, — as if it had drunk cherry-bounce and you smelled its breath. To which is to be added the scent of bruised catnep and the greenness produced by many other forward herbs, and all resounding with the hum of insects. And all this while flowers are rare elsewhere. It is as if you had taken a step suddenly a month forward, or had entered a greenhouse. The rummy scent of the different cherries is remarkable. The *Veronica serpyllifolia* out, say yesterday. Not observed unless looking for it, like an infant's hood, — its pretty little blue-veined face. *Cerastium viscosum*, apparently to-day first.

At I returned I saw, in the Miles meadow, on the bottom, two painted tortoises fighting. Their sternums were not particularly depressed. The smaller had got firmly hold of the loose skin of the larger's neck with his jaws, and most of the time his head was held within the other's shell; but, though he thus had the "upper hand," he had the least command of himself and was on his edge. They were very moderate, — for the most part quite still, as if weary, — and were not to be scared by me. Then they struggled a little, their flippers merely paddling the water, and I could hear the edges of their shells strike together. I took them out into the boat, holding by the smaller, which did not let go of the larger, and so raising both together. Nor did he let go when they were laid in the boat. But when I put them into the water again they instantly separated and concealed themselves.

The hornbeam has lost its leaves; in this respect put it before the white oak and, for [the] present, after the other oaks, judging from buds. Fever-bush well out now.

May 9. Tuesday. To Boston and Cambridge.

Currant in garden, but ours may be a late kind. Purple finch still here.

Looking at the birds at the Natural History Rooms, I find that I have not seen the crow blackbird at all yet this season. Perhaps I have seen the rusty-blackbird, though I am not sure what those slaty-black ones are, as large as the red-wings, nor those pure-black fellows, unless rusty blackbirds. I think that my black-

birds of the morning of the 24th may have been cow-birds.

Sat on end of Long Wharf. Was surprised to observe that so many of the men on board the shipping were pure countrymen in dress and habits, and the seaport is no more than a country town to which they come a-trading. I found about the wharves, steering the coasters and unloading the ships, men in farmer's dress. As I watched the various craft successively unfurling their sails and getting to sea, I felt more than for many years inclined to let the wind blow me also to other climes.

Harris showed me a list of plants in *Hovey's Magazine* (I think for '42 or '43) not in Bigelow's *Botany*, — seventeen or eighteen of them, among the rest a pine I have not seen, etc., etc., *q. v.* That early narrow curved-winged insect on ice and river which I thought an ephemera he says is a *Sialis*, or maybe rather a *Perla*. Thinks it the *Donatia palmata* I gave him. Says the shad-flies (with streamers and erect wings) are ephemerae. He spoke of *Podura nivalis*, I think meaning ours.

Planted melons.

May 10. Now in the mornings I hear the chip-bird under my windows at and before sunrise. Warbling vireo on the elms. The chimney swallow. A peach out in yard, where it had been covered by the snow. The cultivated cherry in bloom.

8 A. M. — To Tall's Island, taking boat at Cliffs.

Had some rain about daylight, which I think makes

the weather uncertain for the day. Damp, April-like mistiness in the air. I take an umbrella with me. The *Salix alba* — and also one or two small native ones by river of similar habits — their catkins together with their leaves make the greatest show now of any trees (which are indigenous or have fairly established themselves), though a *very few* scattered *young* trembles suddenly streak the hillsides with their tender green in some places; and perhaps *young* balm-of-Gileads show in some places;¹ but with the willows it is general and from their size and being massed together they are seen afar. The *S. alba*, partly, indeed, from its commonness and growing together, is the first of *field* trees whose growth makes an impression on the careless and distant observer, — a tender yellowish green. (The mountain-ash, horse-chestnut, and perhaps some other cultivated trees, indeed, if we regard them separately and their leaves alone, which are much larger, are now ahead of the willows.) The birches of all kinds with catkins begin to show a light green.

The inquisitive *yorrick* of the Wilson's thrush, though I hear no veery note. This at entrance of Deep Cut. The oven-bird, and note loud and unmistakable, making the hollow woods ring. This is decidedly smaller than what I have taken to be the hermit thrush. The black and white creeper, unmistakable from its creeping habit. It holds up its head to sing sharp and fine *te che, te che, te che, te che, te che, te che, te chē*. The oven-bird's note is much louder, broader, and more swinging. The latter sits on a low twig quite within

¹ Not important here; rather with birches.

the wood. Yesterday was a quite warm day, and these new birds I hear directly after it.

Vaccinium Pennsylvanicum first put out, and I see a humblebee about some others which are not open, knocking at their doors, which, if open, would be too small for him to enter. *Viola pedata* already numerous — say yesterday without doubt — at Lupine Knoll, paler than the *orata*, — their pale faces. The field sparrow resembles a more slender tree sparrow without the spot on breast, with a light-colored bill and legs and feet, ashy-white breast, and beneath eye a drab, callow look. Note, *phc phc phc phc phc phc, phc phe-c-c-c-c*; holds up its head the while. Thorns are leafing. *Viola blanda* by Corner road at brook and below Cliff Hill Spring. Canoe birch and white ditto leafing. There is a dew or rather rain drop in the centre of the sun-dial (lupine) leaf, where its seven or eight leaflets meet, over the sand. Cornel (*sericea*) leafing along river. I hear the fine, wiry mew of the song sparrow. A catbird mewing.

Saw coupled on a hillock by the water two what I should have called black snakes, — a uniform very dark brown, the male much the smallest. The under side — what little I noticed of the rear of the latter — was a bluish slate; but, when they ran into *the water*, I observed dull-yellowish transverse bars on the back of the female (did not observe the other there), and, when I turned over the male, had a glimpse of a reddish or orange belly. Were they water adders or black snakes? The largest was perhaps between three and four feet.

If that is the leaf of the arrow-wood which looks

so much like a cornel, it will rank next to the *Viburnum nudum*. *Vide* plant by bridge.

In Boston yesterday an ornithologist said significantly, "If you held the bird in your hand —;" but I would rather hold it in my affections.

The wind is southwest, and I have to row or paddle up. The shad-bush in blossom is the first to show like a fruit tree, — like a pale peach, — on the hill-sides, seen afar amid gray twigs, amid leafless shrub oaks, etc., before even its own leaves are much expanded. I dragged and pushed my boat over the road at Deacon Farrar's brook, carrying a roller with me. It is warm rowing with a thick coat. Heard the first regular bullfrog trump, not *very* loud, however, at the swamp white oaks southwest of Pantry. Heard the night-warbler. Saw three ducks on Sudbury meadows still, one partly white, the others all dusky, — probably black ducks. As to the first, with a large dark head and white breast and sides, I am not sure whether it was a golden-eye, or whistler.

Dined at Tall's Island. The tupelo terminates abruptly, as if mutilated at top, and the slender, straggling branches decline thence downward, often longer than the tree is high. The shores of these meadows do not invite me to land on them; they are too low. A lake requires some high land close to it. Meeting-House Hill is the most accessible hereabouts. Anemones common now; they love to grow under brush or tree-tops which the choppers have left. Shad leaves develop fast. Pitch pines started for two or three days in some places, the largest shoots now four inches.

Returning stopped at Rice's. He was feeding his chickens with Indian meal and water. While talking with him heard bobolinks. I had seen what looked like a great stake just sticking out above the surface of the water on the meadows and again covered as if it were fastened at one end. It finally disappeared and probably was a large mud turtle. Rice told me that he had hunted them. You go a little later in this month, — a calm forenoon when the water is smooth, — and "the wind must be south," — and see them on the surface. Deacon Farrar's meadow in time of flood (I had come through this) was a good place.

It began to sprinkle, and Rice said he had got "to bush that field" of grain before it rained, and I made haste back with a fair wind and umbrella for sail. Were those cowbirds in Miles's meadow, about or near the cow? Alders generally have fairly begun to leaf. I came on rapidly in a sprinkling rain, which ceased when I reached Bittern Cliff, and the water smoothed somewhat. I saw many red maple blossoms on the surface. Their keys now droop gracefully about the stems. A fresh, growing scent comes from the moistened earth and vegetation, and I perceive the sweetness of the willows on the causeway. Above the railroad bridge I saw a kingfisher twice sustain himself in one place, about forty feet above the meadow, by a rapid motion of his wings, somewhat like a devil's-needle, not progressing an inch, apparently over a fish. Heard a tree-toad.



May 11. 6 A. M. — To Laurel Hillside by Walden.

Earliest gooseberry in garden open. Heard a Maryland yellow-throat about alders at Trillium Woods, where I first heard one last year, but it finds the alders cut down in the winter. Yellow birch apparently open, its leaf as forward as the *blossom* (*comparatively* — with other birches). Many small swallows hovering over Deep Cut, — probably bank swallows (?). Hear the golden robin. It is wonderful how surely these distinguished travellers arrive when the season has sufficiently revolved. *Prunus Americana*, Canada plum, yesterday at least, at Mr. Brooks's. A common plum to-day.

To sum up leafing of trees, etc., since May 5th, add these: —

Creeping juniper.

Larch; bundles fairly separated on some trees May 6th; open slowly.

Early blueberry.

Amelanchier Botryapium. It came forward fast.

High blackberry.

Young rock maple.

“ red “

“ white (?) [maple].

Alders generally.

Ostrya.

Some trembles suddenly leafed.

Balm-of-Gileads.

Some thorns.

Yellow birch.

Canoe “

White “

Canada plum, I think here.

Pitch pine; some shoots now four inches long.

Norway [pine]?

Cornus sericea.

P. M. — To Saw Mill Brook.

White pines have started; put them with pitch. *Nepeta* just out. I am in a little doubt about the wrens (I do not refer to the snuff-colored one), whether I have seen more than one. All that makes me doubt is that I saw a ruby, or perhaps it might be called fiery, crest on the last — not golden.

Amelanchier oblongifolia, say yesterday, probably the one whose fruit I gathered last year. It does not leaf till it flowers. Sweet-gale has just begun to leaf. The willows on the Turnpike now resound with the hum of bees, and I hear the yellowbird and Maryland yellow-throat amid them. These *yellow* birds are concealed by the yellow of the willows. The cornels generally have fairly started, excepting the *C. florida* (have not noticed the bunch-berry and round-leaved), and for aught I have seen yet may be placed in the order of their flowering, — alternate, panicled, sericea, putting all on the day of the sericea, *i. e.* yesterday. Wild red cherry in road near Everett's open.

The most forward oak *leafets* are, I think, in one place a red, say just started, but I see shrub oak and swamp white catkins in a few places an inch long. Some shrub oak flower-buds are yellowish, some reddish. The *Thalictrum anemonoides* is a perfect and regular white star, but methinks lacks the interesting red tinge of the other. Some young chestnuts have begun — the lower branches — and are earlier than any oaks. White birches are suddenly leafing in some places, so as to make an open veil or gauze of green against the other trees. Young hornbeams

just before cornels; the old ones just begun to leaf. Various slender ferns, without wool, springing apparently at Saw Mill Brook; some quite dark; also brake a foot high. The arrow-wood has just begun. The *young* black birch leafing with others.

While at the Falls, I feel the air cooled and hear the muttering of distant thunder in the northwest and see a dark cloud in that direction indistinctly through the wood. That distant thunder-shower very much cools our atmosphere. And I make haste through the woods homeward *via* Hubbard's Close. Hear the evergreen-forest note. The true poet will ever live aloof from society, wild to it, as the finest singer is the wood thrush, a forest bird. The shower is apparently going by on the north. There is a low, dark, blue-black arch, crescent-like, in the horizon, sweeping the distant earth there with a dusky, rainy brush, and all men, like the earth, seem to wear an aspect of expectation. There is an uncommon stillness here, disturbed only by a rush of the wind from time to time. In the village I meet men making haste to their homes, for, though the heavy cloud has gone quite by, the shower will probably strike us with its tail. Rock maple keys, etc., now two inches long, probably been out some days. Those by the path on Common not out at all. Now I have got home there is at last a still cooler wind with a rush, and at last a smart shower, slanting to the ground, without thunder.

My errand this afternoon was chiefly to look at the gooseberry at Saw Mill Brook. We have two kinds in garden, the earliest of same date to leaf with that

in the swamp, but very thorny, and one later just open. The last is apparently the same with that by Everett's, also just open, and with that this side of E. Wood's. I also know one other, *i. e.* the one at Saw Mill Brook, plainly distinct, with long petioled and glossy heart-shaped leaves, but as yet I find no flowers. I will call this for the present the swamp gooseberry.¹ *Stellaria media*, apparently not long. Butternut beginning to leaf.

Over meadows in boat at sunset to Island, etc.

The rain is over. There is a bow in the east. The earth is refreshed; the grass is wet. The air is warm again and still. The rain has smoothed the water to a glassy smoothness. It is very beautiful on the water now, the breadth of the flood not yet essentially diminished. The ostrya will apparently shed its pollen to-morrow. High blueberry is just leafing. I see the kingbird. It is remarkable that the radical leaves of goldenrod should be already so obvious, *e. g.* the broad-leaved at Saw Mill Brook. What need of this haste? Now at last I see crow blackbirds without doubt. They have probably been here before, for they are put down under April in the bird book (for '37). They fly as if carrying or dragging their precious long tails, broad at the end, through the air. Their note is like a great rusty spring, and also a hoarse chuck. On the whole I think they must have been rusty grackles which I mistook for this bird, and I think I saw their

¹ May 27th. the green shoots are covered with bristly prickles, but I can find no flowers. Is it the same with that by maple swamp in Hubbard's Close with young fruit?

silvery irides; look like red-wings without the red spot. Ground-ivy *just* begins to leaf. I am surprised to find the great poplar at the Island conspicuously in leaf, — leaves more than an inch broad, from top to bottom of the tree, and are already fluttering in the wind, — and others near it — conspicuously before any other native tree, as tenderly green, wet, and glossy as if this shower had opened them. The full-grown white maples are as forward in leafing now as the young red and sugar ones are now, only their leaves are smaller than the last. Put the young, at a venture, after the low blackberry, the old just before the other maples. The balm-of-Gilead is rapidly expanding, and I scent it in the twilight twenty rods off.

The earliest of our indigenous trees, then, to leaf *conspicuously* is the early tremble. (The one or more willows which leaf when they flower, like the *Salix alba*, with their small leaves, are *shrubs*, hardly trees.) Next to it, — close upon it, — *some* white birches, and, apparently close upon this, the balm-of-Gilead and white maple. Two days, however, *may* include them all. The wild red cherry and black cherry, though earlier to begin, are not now conspicuous, but I am not sure that some of the other birches, where young in favorable places, may not be as forward as the white.¹ But the *S. alba*, etc., precede them all. It is surprising what an electrifying effect this shower appears to have had. It is like the christening of the summer, and I

¹ Probably not, to any extent. *Vide p. m.* of 17th *inst.* *Vide list* [p. 297].

suspect that summer weather may be always ushered in in a similar manner, — thunder-shower, rainbow, smooth water, and warm night. A rainbow on the brow of summer. Nature has placed this gem on the brow of her daughter. Not only the wet grass looks many shades greener in the twilight, but the old pine-needles also. The toads are heard to ring more generally and louder than before, and the bullfrogs trump regularly, though not very loudly, reminding us that they are at hand and not drowned out by the freshet. All creatures are more awake than ever. Now, some time after sunset, the robins scold and sing (but their great singing time is earlier in the season), and the Maryland yellow-throat is heard amid the alders and willows by the waterside, and the pectweet and black-birds, and sometimes a kingbird, and the tree-toad somewhat.

Sweet-briar just beginning to leaf generally (?).

May 12. 5.30 A. M. — To Nawshawtuct.

Quite a fog risen up from the river. I cannot see over it from the hill at 6 A. M. The first I have seen. The grass is now high enough to be wet. I see many perfectly geometrical cobwebs on the trees, with from twenty-six to thirty-odd rays, six inches to eighteen in diameter, but no spiders. I suspect they were spun this last warm night very generally. No insects in them yet. They are the more conspicuous for being thickly strewn with minute drops of the mist or dew, like a chain of beads. Are they not meteorologists? A robin's nest in an apple tree with three eggs, — first nest I have

seen, — also a red-wing's nest — bird about it did not look in — before the river is low enough for them to build on its brink. *Viola cucullata* apparently to-day first, near the sassafrases. A small white birch catkin. Fir balsam just begins fairly to loosen bundles. Were they blue-winged teal flew by? for there was a large white spot on the sides aft. I think I scared up the same last night. Fever-root up four or five inches.

Is not this the first day of summer, when first I sit with the window open and forget fire? and hear the golden robin and kingbird, etc., etc.? not to mention the bobolink, vireo, yellowbird, etc., and the trump of bullfrogs heard last evening.

P. M. — To climbing fern.

I have seen a little blue moth a long time. My thick sack is too much yesterday and to-day. The golden robin makes me think of a thinner coat. I see that the great thrush, — brown thrasher, — from its markings, is still of the same family with the wood thrush, etc. These genera are very curious. A shrub or bear oak beginning to leaf. Am struck with the fact that the Assabet has relieved itself of its extra waters to a much greater extent than the main branch. Woolly aphides on alder. Large black birches, not quite leafing nor in bloom. In one bunch of *Viola ovata* in Ministerial Swamp Path counted eleven, an unusual number. What are those handsome conical crimson-red buds not burst on the white [*sic*] spruce? The leaves of the larch begin to make a show. Mosquito. The climbing fern is evergreen — only the flowering top dies — and

spreads by horizontal roots. I perceive no growth yet. The *Amelanchier oblongifolia* has denser and smaller racemes, more erect (?), broader petalled, and not tinged with red on the back. Its downy leaves are now less conspicuous and interesting than the other's. On the whole it is not so interesting a variety.

The bear-berry is well out, perhaps a quarter part of them. May 6th, I thought it would open in a day or two; say, then, the 8th.

At last I hear the veery strain. Why not as soon as the *yorrick*? Heard again the evergreen-forest note. It is a slender bird, about size of white-eyed vireo, with a black throat and I think some yellow above, with dark and light beneath, in the tops of pines and oaks. The only warblers at all like it are black-throated green, black-throated blue, black-poll, and golden-winged, and maybe orange-crowned.

May 13. The portion of the peach trees in bloom in our garden shows the height of the snow-drifts in the winter.

4 P. M. — To V. Muhlenbergii Brook.

The bass suddenly expanding its little round leaves; probably began about the 11th. Uvularias, amid the dry tree-tops near the azaleas, apparently yesterday. Saw the crow blackbird fly over, turning his tail in the wind into a vertical position to serve for a rudder, then sailing with it horizontal. The great red maples begin to leaf, and the young leafets of the red (?) oaks up the Assabet on Hosmer's land, and one at Rock, now begin to be conspicuous. Waxwork begins to leaf.

The sand cherry, judging from what I saw yesterday, will begin to flower to-day.

As for the birds, I have not for some time noticed crows in flocks. The voices of the early spring birds are silenced or drowned in multitude of sounds. The black ducks are probably all gone. Are the rusty grackles still here? Birds generally are now building and sitting. Methinks I heard one snipe night before last? I have not noticed the pine warbler nor the myrtle-bird for a fortnight. The chip-sparrow is lively in the morning. I suspect the purple finches are all gone within a few days. The black and white creeper is musical nowadays, and thrushes and the catbird, etc., etc. Goldfinch heard pretty often.

Insects have just begun to be troublesome.

Young *Populus grandidentata* just opening. Paniced andromeda leaf to-morrow; not for three or four days generally.

May 14. P. M. — To Hill by boat.

A St. Domingo cuckoo, black-billed with red round eye, a silent, long, slender, graceful bird, dark cinnamon (?) above, pure white beneath. It is in a leisurely manner picking the young caterpillars out of a nest (now about a third of an inch long) with its long, curved bill. Not timid. Black willows have begun to leaf, — if they are such in front of Monroe's. White ash and common elm *began* to leaf yesterday, if I have not named the elm before. The former will apparently open to-morrow. The black ash, *i. e.* that by the river, may have been open a day or two. Apple in bloom.

Swamp white oak perhaps will open to-morrow.¹ *Celtis* has begun to leaf. I think I may say that the white oak leaves have now fallen; saw but one or two small trees with them day before yesterday.

Sumach began to leaf, say yesterday. Pear opened, say the 12th. The leafing goes on now rapidly, these warm and moist showery days.

May 15. Judging from those in garden, the witch-hazel began to leaf yesterday, black alder to-day.

P. M. — Up Assabet.

The golden willow catkins are suddenly falling and cover my boat. High blueberry has flowered, say yesterday. Swamp-pink leafing, say yesterday. The *Amelanchier Botryopium* — some of them — have lost blossoms and show *minute* fruit. This I suspect the first *sign* of all wild edible fruit. *Cornus florida* began to leaf, say yesterday. The round-leafed cornel (at Island) is, I [think], as early as any of the cornels to leaf; put it for the present with the *alternifolia*. Gaylussacia begins to leaf to-day and is sticky. *Polygonatum pubescens* will apparently blossom to-morrow. Hickories make a show suddenly; their buds are so large, say yesterday. Young white oaks also yesterday. Old ones hardly to-day, but their catkins quite prominent. Young white oak (and black oak) leaflets now very handsome, red on under side. Black oaks appear to have begun to leaf about the 13th, immediately after the red. The large *P. grandidentata* by river not leafing yet.

¹ No. 110.

Looked off from hilltop. Trees generally are now bursting into leaf. The aspect of oak and other woods at a distance is somewhat like that of a very thick and reddish or yellowish mist about the evergreens. In other directions, the light, graceful, and more distinct yellowish-green forms of birches are seen, and, in swamps, the reddish or reddish-brown crescents of the red maple tops, now covered with keys. Oak leaves are as big as a mouse's ear, and the farmers are busily planting. It is suddenly very warm and looks as if there might be a thunder-shower coming up from the west. The crow blackbird is distinguished by that harsh, springlike note. For the rest, there is a sort of split whistle, like a poor imitation of the red-wing. A yellow butterfly.

Have just been looking at Nuttall's "North American Sylva." Much research, fine plates and print and paper, and unobjectionable periods, but no turpentine, or balsam, or quercitron, or salicin, or birch wine, or the aroma of the balm-of-Gilead, no gallic, or ulmic, or even malic acid. The plates are greener and higher-colored than the words, etc., etc. It is sapless, if not leafless.

May 16. Tuesday. Saw an arum almost open the 11th; say 16th (?), though not shedding pollen 16th at Conantum. Sugar maples, large, beginning to leaf, say 14th; also mulberry in the How garden to-day; locust the 14th; white [*sic*] spruce, the earliest to-day; buttonwood the 14th (*leafing* all).

P. M. — To Conantum by boat with S.

V. peregrina in Channing's garden, — purslane speedwell, — *some* flowers withered; some days at least. Observed all the oaks I know except the chestnut and dwarf chestnut and scarlet (?). I see anthers perhaps to all, but not yet any pollen. Apparently the most forward in respect to blossoming will be the shrub oak, which possibly is now in bloom in some places, then apparently swamp white, then red and black, then white. White oak apparently leaf with swamp white, or say next day.¹ Red and black oaks leaf about together, before swamp white and white. Earliest sassafras opened yesterday; leaf to-day. Butternut will blossom to-morrow. The great fern by sassafras begins to bloom, probably *Osmunda Claytoniana*, two feet high now, — interrupted fern, — its very dark heads soon surmounted with green. Lambkill beginning to leaf. Green-briar leaf yesterday. The rich crimson leaf-buds of the grape, yesterday globular (and some to-day), are rapidly unfolding, scattered along the vine; and the various leaves unfolding are flower-like, and taken together are more interesting than any flower. Is that a hop² by the path at landing on hill with shoots now five or six inches long? Pads begin to appear and spread themselves out on the surface here and there, as the water goes down, — though it is still over the meadows, — with often a scalloped edge like those tin platters on which country people sometimes bake turnovers. Their round green buds here and there look like the

¹ See forward.

² Probably clematis, — one of the earlier plants, then.

heads of tortoises; and I saw in the course of the afternoon three or four just begun to blossom. Golden robin building her nest. It is easy to see now that the highest part of the meadow is next the river. There is generally a difference of a foot at least. Saw around a hardhack stem on the meadow, where the water was about two feet deep, a light-brown globular mass, two inches or more in diameter, which looked like a thistle-head full of some kind of seeds, some of which were separated from it by the agitation made by the boat but returned to it again. I then saw that they were living creatures. It was a mass of gelatinous spawn filled with little light-colored pollywogs (?), or possibly fishes (?), all head and tail, — a long, broad light-colored and thin tail, which was vertical, appended to a head with two eyes. These were about a quarter of an inch long, and when washed off in the water wiggled back to the mass again.

Quite warm; cows already stand in water in the shade of the bridge. I stopped to get some water at the springy bank just above the railroad. I dug a little hollow with my hands so that I could dip some up with a skunk-cabbage leaf, and, while waiting for it to settle, I thought, by a squirming and wriggling movement on the bottom, that the sand was all alive with some kind of worms or insects. There were in fact some worm-skins (?) on it. Looking closer, however, I found that this motion and appearance was produced by the bursting up of the water, which not only trickled down from the bank above but burst up from beneath. The sandy bottom was speckled

with hundreds of small, regularly formed orifices, like those in a pepper-box, about which the particles of sand kept in motion had made me mistake it for squirming worms. There was considerable loam or soil mixed with the sand. These orifices, separated by slight intervals like those in the nose of a water-pot, gave to the spring an unexpectedly regular appearance. It is surprising how quickly one of these springs will run clear. Also drank at what I will call Alder Spring at Clamshell Hill.

Looked into several red-wing blackbirds' nests which are now being built, but no eggs yet. They are generally hung between two twigs, say of button-bush. I noticed at one nest what looked like a tow string securely tied about a twig at each end about six inches apart, left loose in the middle. It was not a string, but I think a strip of milkweed pod, etc., — water asclepias probably, — maybe a foot long and very strong. How remarkable that this bird should have found out the strength of this, which I was so slow to find out!

The leaf-buds at last suddenly burst. It is now very difficult to compare one with another or keep the run of them. The bursting into leaf of the greater number, *including the latest*, is accomplished within a week, say from the 13th of May this year to probably the 20th; that is, within these dates they acquire minute leaflets. This same is the principal planting week methinks. The clethra well leafed, say with the bass (?). *Andromeda calyculata*, leaf to-morrow.

The red or crimsoned young leaves of the black and red (?) oaks. — the former like red damask, — and

the maroon(?)—red inclining to flesh-color — salmon-red (?) — of the white oak, all arranged now like little parasols, — in white oak five leaflets, — are as interesting and beautiful as flowers, downy and velvet-like. Sorrel well out in some warm places. *Ranunculus bulbosus* will flower to-morrow, under Clamshell. Yesterday, when the blossoms of the golden willow began to fall, the blossoms of the apple began to open.



Landed at Conantum by the red cherry grove above Arrowhead Field. The red cherries six inches in diameter and twenty-five or thirty [feet] high, in full bloom, with a reddish smooth bark. It is a splendid day, so clear and bright and fresh; the warmth of the air and the bright tender verdure putting forth on all sides make an impression of luxuriance and genialness, so perfectly fresh and uncantered. A sweet scent fills the air from the expanding leaflets or some other source. The earth is all fragrant as one flower. And bobolinks tinkle in the air. Nature now is perfectly genial to man. I noticed the dark shadow of Conantum Cliff from the water. Why do I notice it at this season particularly? Is it because a shadow is more grateful to the sight now that warm weather has come? Or is there anything in the contrast between the rich green of the grass and the cool dark shade? As we walked along to the C. Cliff, I saw many *Potentilla Canadensis* var. *pumila* now spotting the ground. *Vaccinium vacillans* just out. *Arenaria serpyllifolia* to-morrow. *Myosotis stricta* in several places; how long? Trillium out, possibly yesterday. Maidenhair ferns some up

and some starting, unclenching their little red fists. Fever-bush, say leafed about the 12th.

Returning, the water is smoother than common, — quite glassy in some places. It is getting to be difficult to cross the meadows. Float close under the edge of the wood. But the wind changes to east and blows agreeably fresh. How fair and clysian these rounded and now green Indian hills, with their cool dark shadows on the east side! There are great summer clouds in the sky, — blocked rhomboidal masses tier above tier, white, glowing above, darker beneath.

On Hubbard's meadow, saw a motion in the water as if a pickerel had darted away; approached and saw a middle-sized snapping turtle on the bottom; managed at last, after stripping off my coat and rolling up my shirt-sleeve, by thrusting in my arm to the shoulder, to get him by the tail and lift him aboard. He tried to get under the boat. He snapped at my shoe and got the toe in his mouth. His back was covered with green moss (?), or the like, mostly concealing the scales. In this were small leeches. Great, rough, but not hard, scales on his legs. He made a pretty loud hissing like a cross dog, by his breathing. It was wonderful how suddenly this sluggish creature would snap at anything. As he lay under the seat, I scratched his back, and, filling himself with air and rage, his head would suddenly fly upward, his shell striking the seat, just as a steel trap goes off, and though I was prepared for it, it never failed to startle me, it was so swift and sudden. He slowly inflated himself, and then suddenly went off like a percussion

lock snapping the air. Thus undoubtedly he catches fishes, as a toad catches flies. His laminated tail and great triangular points in the rear edge of his shell. Nature does not forget beauty of outline even in a mud turtle's shell.

Rhodora well out, probably two days, and leaf as long, or yesterday. The stinkpots have climbed two or three feet up the willows and hang there. I suspect that they appear first about the same time with the snapping turtles. Far and near I see painted turtles sunning or tumbling off the little hummocks laid bare by the descending water, their shells shining in the sun.

May 17. 5.30 A. M. — To Island.

The water is now tepid in the morning to the hands (may have been a day or two), as I slip my hands down the paddle. Hear the wood pewee, the warm-weather sound. As I was returning over the meadow this side of the Island, I saw the snout of a mud turtle above the surface, — little more than an inch of the point, — and paddled toward it. Then, as he moved slowly on the surface, different parts of his shell and head just appearing looked just like the scalloped edges of some pads which had just reached the surface. I pushed up and found a large snapping turtle on the bottom. He appeared of a dirty brown there, very nearly the color of the bottom at present. With his great head, as big as an infant's, and his vigilant eyes as he paddled about on the bottom in his attempts to escape, he looked not merely repulsive, but to some extent terrible even as a crocodile. At length, after

thrusting my arm in up to the shoulder two or three times, I succeeded in getting him into the boat, where I secured him with a lever under a seat. I could get him from the landing to the house only by turning him over and drawing him by the tail, the hard crests of which afforded a good hold; for he was so heavy that I could not hold him off so far as to prevent his snapping at my legs. He weighed thirty and a half pounds.

Extreme length of shell.....	15½ inches
Length of shell in middle.....	15 “
Greatest width of shell.....	12½ “
(This was toward the rear.)	
Tail (beyond shell).....	11½ “

His head and neck it was not easy to measure, but, judging from the proportions of one described by Storer, they must have been 10 inches long at least, which makes the whole length 37 inches. Width of head 4½ inches; with the skin of the neck, more than 5. His sternum, which was slightly depressed, was 10½ by 5½. Depth from back to sternum about 7 inches. There were six great scallops, or rather triangular points, on the hind edge of his shell, three on each side, the middle one of each three the longest, about ¾ of an inch. He had surprisingly stout hooked jaws, of a gray color or bluish-gray, the upper shutting over the under,  a more or less sharp triangular beak corresponding to one below; and his flippers were armed with very stout claws 1¼ inches long. He had a very ugly and spiteful face (with a vigilant gray eye, which was never shut in any position of the head), surrounded by the thick and ample

folds of the skin about his neck. His shell was comparatively smooth and free from moss, — a dirty black. He was a *dirty* or speckled white beneath. He made the most remarkable and awkward appearance when walking. The edge of his shell was lifted about eight inches from the ground, tilting now to this side, then to that, his great scaly legs or flippers hanging with flesh and loose skin, — slowly and gravely (?) hissing the while. His walking was perfectly elephantine. Thus he stalked along, — a low conical mountain, — dragging his tail, with his head turned upward with the ugliest and most venomous look, on his flippers, half leg half fin. But he did not proceed far before he sank down to rest. If he could support a world on his back when lying down, he certainly could not stand up under it. All said that he walked like an elephant. When lying on his back, showing his *dirty* white and warty under side, with his tail curved round, he reminded you forcibly of pictures of the dragon. He could not easily turn himself back; tried many times in vain, resting betweenwhiles. Would inflate himself and convulsively spring with head and all upward, so as to lift his shell from the ground, and he would strike his head on the ground, lift up his shell, and catch at the earth with his claws. His back was of two great blunt ridges with a hollow between, down the middle of which was a slight but distinct ridge also. There was also a ridge of spines more or less hard on each side of his crested tail. Some of these spines in the crest of the tail were nearly half an inch high. Storer says that they have five *claws*

on the fore legs, but only four on the hind ones. In this there was a *perfectly* distinct fifth *toe* (?) on the hind legs, though it did not pierce the skin; and on the fore legs it did not much more. S. does not say how many toes he has. These claws must be powerful to dig with.

This, then, is the season for hunting them, now that the water is warmer, before the pads are common, and the water is getting shallow on the meadows. E. Wood, Senior, speaks of two seen fighting for a long time in the river in front of his house last year. I have heard of one being found in the meadow in the winter surrounded by frozen mud. Is not this the heaviest animal found wild in this township? Certainly none but the otter approaches it. Farrar says that, when he was eleven, one which he could not lift into the boat towed him across the river; weighed twenty-nine.

Lilac is out and horse-chestnut. The female flowers — crimson cones — of the white [*sic*] spruce, but not yet the staminate.

The turtle was very sluggish, though capable of putting forth great strength. He would just squeeze into a flour barrel and would not quite lie flat in it when his head and tail were drawn in. There was [a] triangular place in the bottom of his mouth and an



orifice within it through which, apparently, he breathed, the orifice opening and shutting. I hear of a man who

injured his back seriously for many years by carrying one some distance at arm's length to prevent his biting him. They are frequently seen fighting and their shells heard striking together.

P. M. — To Cedar Swamp *via* Assabet.

The tupelo began to leaf apparently yesterday. The large green keys of the white maples are now conspicuous, looking like the wings of insects. *Azalea nudiflora* in woods begins to leaf now, later than the white kind. *Viola Muhlenbergii* out, say yesterday. It is a pale violet. Judging from the aspect of the *Lentago* yesterday, I should put its leafing decidedly before *Viburnum nudum*. Also apparently the late rose soon after the one observed, and the moss about same time with first. The swamp white and white oak are slow to leaf. Large maples, too, are not rapid; but the birches, aspens, and balm-of-Gileads burst out suddenly into leaf and make a great show. Also the *young* sugar maples in the street now and for some days have made a show of broad luxuriant leaves, early and rapidly. In the case of the early aspen you could almost see the leaves expand and acquire a darker green—this to be said the 12th or 13th or 14th—under the influence of the sun and genial atmosphere. Now they are only as big as a ninepence, to-morrow or sooner they are as big as a pistareen, and the next day they are as big as a dollar. So too the green veils or screens of the birches rapidly thickened. This from its far greater prevalence than the aspens, balm-of-Gilead, white maples, etc., is the first to give the woodlands anywhere generally a (fresh) green aspect. It is the first to clothe large tracts of deciduous woodlands with green, and perchance it marks an epoch in the season, the *transition* decidedly and generally from bare twigs to leaves. When the birches have put on their green sacks, then

a new season has come. The light reflected from their tender yellowish green is like sunlight.

The turtle's snapping impressed me as something mechanical, like a spring, as if there were no volition about [it]. Its very suddenness seemed too great for a conscious movement. Perhaps in these cold-blooded and sluggish animals there is a near approach to the purely material and mechanical. Their very tenacity of life seems to be owing to their insensibility or small amount of life, — indeed, to be an irritation of the muscles. One man tells me of a turtle's head which, the day after it was cut off, snapped at a dog's tail and made him run off yelping, and I have witnessed something similar myself. I can think of nothing but a merely animated jaw, as it were a piece of mechanism. There is in this creature a tremendous development of the jaw, and, long after the head is cut off, this snaps vigorously when irritated, like a piece of mechanism. A naturalist tells me that he dissected one and laid its heart aside, and he found it beating or palpitating the next morning. They are sometimes baited with eels and caught with a hook. Apparently the best time to hunt them is in the morning when the water is smooth.

There is a surprising change since I last passed up the Assabet; the fields are now clothed with so dark and rich a green, and the wooded shore is all lit up with the tender, bright green of birches fluttering in the wind and shining in the light, and red maple keys are seen at a distance against the tender green of birches and other trees, tingeing them.

The wind is easterly, having changed, and produces

an agreeable raw mistiness, unlike the dry blue haze of dog-days, *just* visible, between a dew and a fog for density. I sail up the stream, but the wind is hardly powerful enough to overcome the current, and sometimes I am almost at a standstill where the stream is most contracted and swiftest, and there I sit carelessly waiting for the struggle between wind and current to decide itself. Then comes a stronger puff, and I see by the shore that I am advancing to where the stream is broader and runs less swiftly and where lighter breezes can draw me. In contracted and swift-running places, the wind and current are almost evenly matched. It is a pleasing delay, to be referred to the elements, and meanwhile I survey the shrubs on shore. The white cedar shows the least possible life in its extremities now. Put it with the arbor-vitæ, or after it. Poison dogwood beginning to leaf, say yesterday. Nemo-panthes out; leafed several days ago. And the clustered andromeda leafed apparently a day or more before it. Gold-thread out. *Viola palmata*. I cannot well examine the stone-heaps, the water is so deep. Muskrats are now sometimes very bold; lie on the surface and come swimming directly toward the boat as if to reconnoitre — this in two cases within a few days. Pretty sure to see a crescent of light under their tails when they dive. The splendid rhodora now sets the swamps on fire with its masses of rich color. It is *one of the first* flowers to catch the eye at a distance in masses, — so naked, unconcealed by its own leaves.

Observed a rill emptying in above the stone-heaps, and afterward saw where it ran out of June-berry

Meadow, and I considered how surely it would have conducted me to the meadow, if I had traced it up. I was impressed as it were by the intelligence of the brook, which for ages in the wildest regions, before science is born, knows so well the level of the ground and through whatever woods or other obstacles finds its way. Who shall distinguish between the *law* by which a brook finds its river, the *instinct* [by which] a bird performs its migrations, and the *knowledge* by which a man steers his ship round the globe? The globe is the richer for the variety of its inhabitants. Saw a large gray squirrel near the split rock in the Assabet. He went skipping up the limb of one tree and down the limb of another, his great gray rudder undulating through the air, and occasionally hid himself behind the main stem. The *Salix nigra* will open to-morrow.

May 18. To Pedrick's meadow.

Viola lanceolata, two days at least. Celandine yesterday. The *V. pedata* beginning to be abundant. Chinquapin was probably a little later to leaf, and will be to flower, than the shrub oak. Its catkins, light-green, remind me of those of the swamp white oak. Buttonwood balls, one third inch in diameter, have been blown off, and *some* have a dull-purplish fuzzy surface (most are solid green); apparently just beginning to blossom. Red cedar shows the least possible sign of starting. The pyrus, probably black-fruited, in bloom as much as two days. Huckleberry. Now for the tassels of the shrub oak; I can find no pollen yet about them, but, as the oak catkins in my pitcher,

plucked yesterday, shed pollen to-day, I think I may say that the bear shrub oak, red and black oaks open to-morrow.¹ I see the pincushion or crimson-tinged galls now on shrub oaks around the bases of the young shoots, — some green-shell ones on oak leaves, like large peas, and small now greenish-white fungus-like ones on swamp-pink. Thus early, before the leaves are a quarter expanded, the gall begins. I see potentillas already ascending five or six inches, but no flower on them, in the midst of low ones in flower. *Smilacina trifolia* will apparently open to-morrow in Pedrick's meadow. A large clay-brown and blotched snake; is it the chicken snake or water adder? Beach plum in full bloom by red house, apparently two or three days. It is one of the very latest plants to leaf; only a few buds just begin to show any green. One man has been a-fishing, but said the water and the wind were too high; caught a few.

High winds all day racking the young trees and blowing off blossoms.

May 19. 5.30 A. M. — To Nawshawtuct and Island.

Ranunculus Purshii will apparently open to-day. Its little green buds somewhat like a small yellow lily. The water has now fallen so much that the grass is rapidly springing up through it on the meadows. Red-wing's nest with two eggs. A geranium, apparently yesterday. *Celtis* for several days. Button-bush began to leaf, say the 17th; *i. e.*, some of its buds began to burst. Choke-cherry out. *Aralia nudicaulis*, apparently

¹ *Vide* 22d.

yesterday. The red-eye. The early thorn looks as if it would open to-day. I hear the *sprayey*-note frog now at sunset. Now for four or five days, — though they are now for the most part large, — or since the 15th came in, the young and tender oak leaves, disposed umbrella-wise about the extremities of last year's twigs, have been very attractive from their different tints of red. Those of the black and white oaks are, methinks, especially handsome, the former already showing their minute and tender bristles, and all handsomely lobed. Some of the black oak leaves are like a rich, dark-red velvet; the white oak have a paler and more delicate tint, somewhat flesh-colored, though others are more like the black, — what S. calls a maroon red. So of the bear scrub oak; the swamp white and chinquapin are more of a downy or silvery white. The white pine shoots are now two or three inches long generally, — upright light marks on the body of dark green. Those of the pitch pine are less conspicuous. Hemlock does not show yet. The light shoots, an inch or so long, of the fir balsam spot the trees. The larch is a mass of fresh, airy, and cool green. Arbor-vitæ, red cedar, and white show no life except on the closest inspection. They are some of the latest trees. The juniper is about with the fir balsam. I have already described the oaks sufficiently. The hazel is now a pretty green bush. Butternuts, like hickories, make a show suddenly with their large buds. I have not examined the birches, except the white, this year. The alders are slow to expand their leaves, but now begin to show a mass of green along the river, and,

with the willows, afford concealment to the birds' nests. The birds appear to be waiting for this screen. The robin's nest and eggs are the earliest I see. Saw one in the midst of a green-briar over the water the other day, before the briar had put out at all, which shows some foresight, for it will be perfectly invisible, if not inaccessible, soon.

The great poplar is quite late to leaf, especially those that blossom; not yet do they show much, — a silvery leaf. The golden willow is the only tree used about here at the same time for a fence and for shade. It also prevents the causeways from being washed away. The black willow is the largest as well as the handsomest of our native willows. Young elms are leafing pretty fast, old ones are late and slow. The samaræ of the elms first make a thick top, leaf-like, before the leaves come out. Ash trees are like hickories in respect to the size of the young leaves. The young leaflets of the wild holly (*Nemopanthes*) on the 17th were peculiarly thin and pellucid, yellow-green. I know of none others like them. Those of the black alder are not only late but dark. The button-bush is not only very late, but the buds are slow to expand, and methinks are very far apart, so that they do not soon make a show; for the most part at a little distance there is no appearance of life in them even yet. The sweet viburnum and also the naked are early to make a show with their substantial leaves. The andromedas are all late, — if I remember, the clustered (?) the earliest. The common swamp-pink is earlier to leaf but later to blossom than the *nudiflora*. The rhodora

is late, and is *naked* flowering. The mountain laurel is one of the latest plants. The resinous dotted leaves of the huckleberry are interesting. The high blueberries are early (to bloom) and resound with the hum of bees. All the cornels begin to leaf apparently *about* the same time, though I do not know but the round-leaved is the earliest.¹ I have not observed the dwarf. The witch-hazel is rather late, and can afford to be. One kind of thorn is well leafed, the other not. The mountain-ash is the first tree which grows here, either naturally or otherwise, to show green at a little distance. Is it not true that *trees* which belong peculiarly to a colder latitude are among our earliest and those which prefer a warmer among our latest? The choke-berry's shining leaf is interesting. With what unobserved secure dispatch nature advances! The amelanchiers have bloomed, and already both kinds have shed their blossoms and show minute green fruit. There is not an instant's pause! The beach plum — such as I have observed — is the latest to begin to expand of all deciduous shrubs or trees, for aught I know. The sight of it suggests that we are near the seacoast, that even our sands are in some sense littoral, — or beaches. The cherries are all early to leaf, but only one, perhaps the wild red, and that in one place, is in mass enough to make much show. The woodbine is well advanced — shoots two or three inches long. It must have begun to leaf more than a week ago. The linden leafs suddenly and rapidly, — a round, thin, transparent-looking (?) leaf.

¹ The *C. florida* is rather late.

A washing day, — a strong rippling wind, and all things bright.

May 20. Woodbine shoots (brick house) already two or three inches long; put it, say, with the red oak. *Potentilla argentea*. White [*sic*] spruce, male flowers. White ash, apparently a day or two. Mr. Prichard's. The English hawthorn opens at same time with our earlier thorn.

Very low thunder-clouds and showers far in the north at sunset, the wind of which, though not very strong, has cooled the air. Saw the lightning, but could not hear the thunder. I saw in the northwest first rise, in the rose-tinted horizon sky, a dark, narrow, craggy cloud, narrow and projecting as no cloud on earth, seen against the rose-tinged sky, — the crest of a thunder-storm, beautiful and grand. The steadily increasing sound of toads and frogs along the river with each successive warmer night is one of the most important peculiarities of the season. Their prevalence and loudness is in proportion to the increased temperature of the day. It is the first earth-song, beginning with the croakers, (the cricket's not yet), as if the very meads at last burst into a meadowy song. I hear a few bullfrogs and but few hylodes. Methinks we always have at this time those washing winds as now, when the choke-berry is in bloom, — bright and breezy days blowing off some apple blossoms.

May 21. Sunday. Quince. A slight fog in morning. Some bullfrogs in morning, and I see a yellow swelling

throat. They — these throats — come with the yellow lily. Cobwebs on grass, the first I have noticed. This is one of the *late* phenomena of spring. These little dewy nets or gauze, a faery's washing spread out in the night, are associated with the finest days of the year, days long enough and fair enough for the worthiest deeds. When these begin to be seen, then is not summer come? I notice the fir balsam sterile flowers already effete.

P. M. — To Deep Cut.

A shower, heralded only by thunder and lightning, has kept me in till late in the afternoon. The sterile *Equisetum arvense*, now well up, green the bank. Bluets begin to whiten the fields. A tanager, — the surprising red bird, — against the darkening green leaves. I see a *little* growth in the mitchella. The larger *Populus grandidentata* here are pretty well leaved out and may be put with the young ones. *Tricentalis*, perhaps yesterday. *Smilacina bifolia*, apparently to-morrow. Hear the squeak of a nighthawk. The deciduous trees now begin to balance the evergreens. Red oaks are quite green. Young hemlocks have grown a quarter of an inch; old just started; but by to-morrow they will show their growth by contrast more than the button-bush. *Lycopodiums* just started, — light or yellowish green tips. *Cornus Canadensis*. The single-berry prinus leafs, say with the other. Was surprised to find a nemopantes on the upland, — Stow's Clearing. Dangle-berry leafs, say next after the common huckleberry. Young checkerberry reddish shoots just begin to show themselves.

Twilight on river.

The reddish white lily pads here and there and the heart-leaves begin to be seen. A few pontederias, like long-handled spoons. The water going rapidly down, that often purplish bent grass is seen lying flat along it a foot or more, in parallel blades like matting. It is surprising how the grass shoots up now through the shallow water on the meadows, so fresh and tender, you can almost see it grow, for the fall of the water adds to its apparent growth; and the river weeds, too, — flags, polygonums, and potamogetons, etc., etc., — are rapidly pushing up. Sassafras is slow to leaf. A whip-poor-will.

May 22. 5.30 A. M. — Up Assabet.

Now begins the slightly sultryish morning air into which you awake early to hear the faint buzz of a fly or hum of other insect. The teeming air, deep and hollow, filled with some spiritus, pregnant as not in winter or spring, with room for imps, — good angels and bad, — many chambers in it, infinite sounds. I partially awake the first time for a month at least. As if the cope of the sky lifted, the heat stretched and swelled it as a bladder, and it remained permanently higher and more infinite for the summer. Suggesting that the night has not been, with its incidents. Naked-flowered] azalea in garden and wood. The dew now wets me completely each morning. Swamp white oak began to blossom apparently yesterday; the anthers completely shed their pollen at once and are effete — only a small part as yet, however. The red oak, *i. e.* at

point of Island; as I did not observe it out on the 19th, say 20th. The white oak will apparently begin to-day.¹ The hemlock may have begun to bloom the 20th. *Cornus florida*. Galls, puff-like, on naked azalea and huckleberries. The later thorn is not much if any later to leaf than the other, apparently. Saw a small diving duck of some kind suddenly dash out from the side of the river above the hemlocks, like my red-breasted merganser, plowing the water with a great noise and flapping, and dive in the middle of the stream. Searching carefully, I after saw its head out amid the alders on the opposite side. When I returned, it again dived in the middle of the stream. Why should it attract my attention first by this rush? Shoots along half risen from the water, striking it with its wings. I saw one of the same family run thus a long way on the Penobscot. *Ranunculus recurvatus* out at V. Muhlenbergii Brook since the 17th; say 19th.

10 A. M. — To Fair Haven by boat.

I see many young and tender dragon-flies, both large and small, hanging to the grass-tops and weeds and twigs which rise above the water still going down. They are weak and sluggish and tender-looking, and appear to have lately crawled up these stems from the bottom where they were hatched, and to be waiting till they are hardened in the sun and air. (A few, however, are flying vigorously as usual over the water.) Where the grass and rushes are thick over the shallow water, I see their large gauze-like wings vibrating in the

¹ Some not open on the 26th.

breeze and shining in the sun. It is remarkable that such tender organizations survive so many accidents.

The black oak apparently began to blossom yesterday. The bear shrub oaks apparently began to bloom with the red, though they are various. Put the chinquapin with them immediately after. Lousewort fairly out in front of geum, on Hill.

Examined the button-bush hummock. It is about eighteen feet by ten at the widest part and from one to one and a half feet thick. It consists chiefly of button-bushes, four or five feet high and now as flourishing as any, a high blueberry (killed), and some water silkweeds springing up (five or six inches) at the foot of the dry stalks, together with the grass and soil they grew in. Though these have been completely covered by the freshet for some weeks since it was deposited here, and exposed to high winds and waves, it has not sensibly washed away. These masses draw so much water that they ground commonly on the edge of the river proper, and so all things combine to make this a border bush or edging. (They are sometimes, when the water is high, dropped in the middle of the meadow, and make islands there.) They thus help to define the limits of the river and defend the edge of the meadow, and, the water being still high, I see at Fair Haven the sweeping lines formed by their broad tops mixed with willows in the midst of the flood, which mark the mid-summer boundary of the pond. They not only bear but require a good deal of water for their roots. Apparently these will not feel their removal at all. Every rod or two there is a great hummock of meadow sward

and soil without bushes. The muskrats have already taken advantage of this one to squat on and burrow under, and by raising the shore it will afford them a refuge which they had not before here.

Senecio, probably earlier still at Boiling Spring. *Rhus radicans* apparently leafs with the *Toxicodendron*. The apple bloom is chiefly passed. *Rubus sempervirens* put forth leaf soon after *R. Canadensis*. The dwarf sumach is just starting, some of them decidedly later than the button-bush!

At Clamshell, the small oblong yellow heads of yellow clover, some days. Tall buttercup, a day or two. Dandelions, for some time, gone to seed. Water saxifrage, now well out. As I started away from Clamshell, it was quite warm — the seats — and the water glassy smooth, but a little wind rose afterward. Muskrats are frequently seen to dive a dozen rods from shore and not discovered again. A song sparrow's callow young in nest. A summer yellowbird close by sounded *we we we tchea tchea tche wiss wiss wiss*. I perceive some of that peculiar fragrance from the marsh at the Hubbard Causeway, though the marsh is mostly covered. Is it a particular compound of odors? It is more remarkable and memorable than the scent of any particular plant, — the fragrance, as it were, of the earth itself. The loud cawing of a crow heard echoing through a deep pine wood, — how wild! unconverted by all our preaching. Now and then the dumping sound of frogs. Large pinweed six inches high. Lupines have been out under Fair Haven Hill several days. *Viola pedata* blue the field there.

I rest in the orchard, doubtful whether to sit in shade or sun. Now the springing foliage is like a sunlight on the woods. I was first attracted and surprised when I looked round and off to Conantum, at the smooth, lawn-like green fields and pasturing cows, bucolical, reminding me of new butter. The air so clear — as not in summer — makes all things shine, as if all surfaces had been washed by the rains of spring and were not yet soiled or begrimed or dulled. You see even to the mountains clearly. The grass so short and fresh, the tender yellowish-green and silvery foliage of the deciduous trees lighting up the landscape, the birds now most musical, the sorrel beginning to redden the fields with ruddy health, — all these things make earth now a paradise. How many times I have been surprised thus, on turning about on this very spot, at the fairness of the earth!

The alders (groves) begin to look like great mosses, so compact and curving to the ground at their edges, — as one system. Pairs of yellow butterflies are seen coquetting through the air higher and higher. Comandra, apparently yesterday. I am surprised, as I go along the edge of the Cliffs, at the oppressive warmth of the air from the dry leaves in the woods on the rocks. Compared with the oaks and hickories, the birches are now a dark green. The order of lightness is apparently black oak silvery (and probably large white), red oaks and hickories, *apparently* more advanced, and green white birches, and then pines. Young white oaks on plain are reddish. A pitch pine sheds pollen on Cliffs. The pines are more conspicuous now than ever, miles

off, and the leaves are not yet large enough to conceal them much. It is noon, and I hear the cattle crashing their way down the Cliff, seeking the shade of the woods. They climb like goats. Others seek the water and the shade of bridges. Erigeron, a day or two. It loves moist hillsides.

Landed next at the Miles Swamp. The dense cylindrical racemes of the choke-cherry, some blasted into a puff. Caterpillars prey on this too. I do not find any arums open yet. There are many little gnats dead within them. Barberry at Lee's Cliff, two (??) days; elsewhere just beginning. Some *krigias* out of bloom. *Galium Aparine* (?), a day or two, but with six (?) leaves. Those scars where the woods were cut down last winter now show, for they are comparatively slow to be covered with green, — only bare dead leaves, reddish-brown spots.

First observe the creak of crickets. It is quite general amid these rocks. The song of only one is more interesting to me. It suggests lateness, but only as we come to a knowledge of eternity after some acquaintance with time. It is only late for all trivial and hurried pursuits. It suggests a wisdom mature, never late, being above all temporal considerations, which possesses the coolness and maturity of autumn amidst the aspiration of spring and the heats of summer. To the birds they say: "Ah! you speak like children from impulse; Nature speaks through you; but with us it is ripe knowledge. The seasons do not revolve for us; we sing their lullaby." So they chant, eternal, at the roots of the grass. It is heaven where

they are, and their dwelling need not be *heaved* up. Forever the same, in May and in November (?). Serenely wise, their song has the security of prose. They have drunk no wine but the dew. It is no transient love-strain, hushed when the incubating season is past, but a glorifying of God and enjoying of him forever. They sit aside from the revolution of the seasons. Their strain is unvaried as Truth. Only in their saner moments do men hear the crickets. It is balm to the philosopher. It tempers his thoughts. They dwell forever in a temperate latitude. By listening to whom, all voices are tuned. In their song they ignore our accidents. They are not concerned about the news. A quire has begun which pauses not for any news, for it knows only the eternal. I hear also *pe-a-wee pe-a-wee*, and then occasionally *pee-yu*, the first syllable in a different and higher key emphasized, — all very sweet and naïve and innocent. *Rubus Canadensis* out, on the rocks. A hummingbird dashes by like a loud humblebee.

May 23. Tuesday. P. M. — To Cedar Swamp by Assabet.

The cobwebs, apparently those I saw on the bushes the morning of the 12th, are now covered with insects, etc. (small gnats, etc.), and are much dilapidated where birds have flown through them. As I paddle up the Assabet, off the Hill, I hear a loud rustling of the leaves and see a large scared tortoise sliding and tumbling down the high steep bank a rod or more into the water. It has probably been out to lay its

eggs. The old coal-pit heap is a favorite place for them. The wood pewee sings now in the woods behind the spring in the heat of the day (2 P. M.), sitting on a low limb near me, *pe-a-wee, pe-a-wee*, etc., five or six times at short and regular intervals, looking about all the while, and then, naïvely, *pee-a-oo*, emphasizing the first syllable, and begins again. The last is, in emphasis, like the scream of a hen-hawk. It flies off occasionally a few feet, and catches an insect and returns to its perch between the bars, not allowing this to interrupt their order. Scare up a splendid wood (?) duck, alternate blue and chestnut (?) forward, which flew into and lit in the woods; or was it a teal? Afterward two of them, and my diver of yesterday.

The bent grass now lies on the water (commonly light-colored) for two feet. When I first saw this on a pool this spring, with the deep dimple where the blade emerges from the surface, I suspected that the water had risen gently in calm weather and was heaped about the dry stem as against any surface before it is wetted. But now the water is rapidly falling, and there is considerable wind. Moreover, when my boat has passed over these blades, I am surprised on looking back to see the dimple still as perfect as before. I lift a blade so as to bring a part which was under water to the surface, and still there is a perfect dimple about it; the water is plainly repelled from it. I pull one up from the bottom and passing it over my lips am surprised to find that the front side is perfectly dry from the root upward and cannot be wet, but the back side is wet. It has sprung and grown in the water, and

yet one of its surfaces has never been wet. What an invaluable composition it must be coated with! The same was the case with the other erect grasses which I noticed growing in the water, and with those which I plucked on the bank and thrust into it. But the flags were wet both sides.¹ The one surface repels moisture perfectly.

The barbarea has been open several days. The first yellow dor-bug struggling in the river. The white cedar has now grown quite *perceptibly*, and is in advance of any red cedar which I have seen. Saw a hummingbird on a white oak in the swamp. It is strange to see this minute creature, fit inhabitant of a parterre, on an oak in the great wild cedar swamp. The clustered andromeda appears just ready to open; say to-morrow.² The smilacina is abundant and well out here now. A new warbler (?).

We soon get through with Nature. She excites an expectation which she cannot satisfy. The merest child which has rambled into a copsewood dreams of a wilderness so wild and strange and inexhaustible as Nature can never show him. The red-bird which I saw on my companion's string on election days I thought but the outmost sentinel of the wild, immortal camp,— of the wild and dazzling infantry of the wilderness,— that the deeper woods abounded with redder birds still; but, now that I have threaded all our woods and waded the swamps, I have never yet met with his compeer, still less his wilder kindred.³ The red-

¹ *Vide* scrap-book.

² Rather the 25th.

³ [*Cf. Week*, pp. 56, 57; *Riv.* 70, 71.]

bird which is the last of Nature is but the first of God. The White Mountains, likewise, were smooth mole-hills to my expectation. We *condescend* to climb the crags of earth. It is our weary legs alone that praise them. That forest on whose skirts the red-bird flits is not of earth. I expected a fauna more infinite and various, birds of more dazzling colors and more celestial song. How many springs shall I continue to see the common sucker (*Catostomus Bostoniensis*) floating dead on our river! Will not Nature select her types from a new fount? The vignette of the year. This earth which is spread out like a map around me is but the lining of my inmost soul exposed. In me is the sucker that I see. No wholly extraneous object can compel me to recognize it. I am guilty of suckers. I go about to look at flowers and listen to the birds. There was a time when the beauty and the music were all within, and I sat and listened to my thoughts, and there was a song in them. I sat for hours on rocks and wrestled with the melody which possessed me. I sat and listened by the hour to a positive though faint and distant music, not sung by any bird, nor vibrating any earthly harp. When you walked with a joy which knew not its own origin. When you were an organ of which the world was but one poor broken pipe. I lay long on the rocks, foundered like a harp on the seashore, that knows not how it is dealt with. You sat on the earth as on a raft, listening to music that was not of the earth, but which ruled and arranged it. Man *should be* the harp articulate. When your cords were tense.

Think of going abroad out of one's self to hear music, — to Europe or Africa! Instead of so living as to be the lyre which the breath of the morning causes to vibrate with that melody which creates worlds — to sit up late and hear Jane Lind!

You may say that the oaks (all but the chestnut oak I have seen) were in bloom yesterday; *i. e.*, shed pollen more or less. Their blooming is soon over. Water-bugs and skaters coupled. Saw in Dakin's land, near the road, at the bend of the river, fifty-nine bank swallows' holes in a small upright bank within a space of twenty by one and a half feet (in the middle), part above and part below the sand-line. This would give over a hundred birds to this bank. They continually circling about over the meadow and river in front, often in pairs, one pursuing the other, and filling the air with their twittering.

Mulberry out to-day.

May 24. 4.30 A. M. — To Cliffs.

A considerable fog, but already rising and retreating to the river. There are dewy cobwebs on the grass. The morning came in and awakened me early, — for I slept with a window open, — and the chip-bird was heard also. As I go along the causeway the [sun] rises red, with a great red halo, through the fog. When I reach the hill, the fog over the river already has its erectile feathers up. I am a little too late. But the level expanse of it far in the east, now lit by the sun, with countless tree-tops like oases seen through it, reminds of vast tracts of sand and of the seashore. It is like a

greater dewy cobweb spread over the earth. It gives a wholly new aspect to the world, especially in that direction. The sun is eating up the fog. As I return down the hill, my eyes are cast toward the very dark mountains in the northwest horizon, the remnants of a hard blue scalloped rim to our saucer. As if a more celestial ware had formerly been united there to our earthen. Old china are they, worth keeping still on our sideboards, though fragmentary.

The early cinquefoil now generally yellows the banks. Put the sage willow with the black for the present. The black spruce apparently blossomed with the white [*sic*], but its leaf-buds have not yet fairly started.

P. M. — To Pedrick's meadow.

The side-flowering sandwort well out in Moore's Swamp. The pyrus has now for some days taken the place of the amelanchier, though it makes less show. How sweet and peculiar the fragrance of the different kinds of cedar! It is imparted to your hands. Lady's-slipper since the 18th; say 22d. Waded into Beck Stow's. The water was so cold at first that I thought it would not be prudent to stand long in it, but when I got further from the bank it was comparatively warm. True, it was not then shaded nor quite so deep, but I suppose there were some springs in the bank. Surprised to find the *Andromeda Polifolia* in bloom and apparently past its prime at least a week or more. It is in water a foot and a half deep, and rises but little above it. The water must have been several inches

higher when it began to bloom. A timid botanist would never pluck it. Its flowers are more interesting than any of its family, almost globular, crystalline white, even the calyx, except its tips, tinged with red or rose. Properly called water andromeda: you must wade into water a foot or two deep to get it. The leaves are not so conspicuously handsome as in the winter. Also the buck-bean, apparently as old, — say a week, — in the same depth of water. The *calyculata* almost completely done, and the high blueberry getting thin. *Potentilla Canadensis* var. *simplex*, perhaps two days. I find a male juniper, with effete blossoms quite large, yet so fresh that I suspect I may have antedated it. Between Beck Stow's and Pedrick's meadow. The red cedar has grown considerably, after all. My *Rubus triflorus* (only Bigelow and Gray place it on hillsides) is nearly out of bloom. It is the same I found at the Miles Swamp; has already some green fruit as big as the *smallest* peas. Must be more than a week old. It is the only annual rubus described. May it not be a new kind?

This evening I hear the hum of dor-bugs, — a few, — but listen long in vain to hear a hylodes.

There being probably no shrub or tree which has not begun to leaf now, I sum up the order of their leafing thus (wild and a few tame).¹

Their buds begin to burst into leaf: —

The earliest gooseberry in garden and swamp, April 20.

? Elder, longest shoots of any, in *some* places (May 5).

Raspberry in swamps.

¹ *Vide* [p. 255].

- Thimble-berry (perhaps in favorable places only).
 Wild red cherry in some places.
 Meadow-sweet.
 ? Red currant, but slow to advance; observed only ours, which is late?
 ? Second gooseberry.
Salix alba, April 27.
 ?? Black currant, not seen.
 Small dark native willow blossoming (?) and leafing.
 ?? Early willow, two-colored, not seen.
 ?? Muhlenberg's (?), not seen.
 Young black cherry.
 Choke-cherry shoots.
Viburnum Lentago } not carefully distinguished between.
 ? " *nudum* }
 Diervilla, advances fast.
 Barberry in favorable places.
 Some young apples in favorable places.
 Young alders, slow to advance, both kinds.
 Early rose.
 ? Moss rose, not seen.
 Sweet-fern, slow to advance.
 Mountain-ash, May 5, larger leaves than any tree and first to show green at a distance.
 Cultivated cherry.
Pyrus arbutifolia.
 ? Late pyrus, not seen.
 Horse-chestnut.
 Hazel, May 5.
 ? Beaked hazel, not distinguished.
 Early large apples.
 Late gooseberry in garden.
 ? Pears, not seen.
 Wild red cherry generally: or let it go with the earliest.
 ? Dwarf or sand cherry.
 Hardhack.
 ?? Clematis, shoots five or six inches long, May 16.
 Low blackberry.

- ?? *Rubus triflorus*, eight inches high, May 22.
 ? Quince.
 ?? Mayflower, not seen.
 Young red maples.
 ?? Fever-root, four or five inches high, May 12.
 Creeping juniper comes forward like fir balsam.
 Larch, opens slowly; makes a show, May 12.
Vaccinium Pennsylvanicum.
Amelanchier Botryapium, fast.
 High blackberry.
 ? *Sempervirens*, not seen.
 Young rock maple.
 ? Large white "
 Alders generally.
 ?? Linnaea, not seen.
 Ostrya.
Amelanchier oblongifolia.
 Early trembles suddenly.
 ?? Dwarf cassandra.
 Balm-of-Gilead.
 Early thorns.
 ? Late " , not seen.
 Yellow birch.
 ? Cockspur thorn, not seen.
 Canoe birch, shoots.
 White " , shoots.
 ? Black, young (large not on 12th).
 ? Canada plum.
 Pitch pine.
 ?? Bear-berry, not seen.
 ? Norway pine, not seen.
 White pine.
 Young hornbeam.
Cornus alternifolia.
 ? Round-leaved [cornel], seen late.
 Panicked cornel.
 Silky "
 Sweet-gale, May 11.

- Red oak, May 11.
 Bass, sudden.
 Young chestnuts and lower limbs; full leafing of large not seen.
 ?? Clethra, seen late.¹
 Old hornbeam.
 ?? Maple-leaved arrow-wood, not seen till late.
 Arrow-wood.
 Butternut.
 High blueberry.
Rhus Toxicodendron.
 ? var. *radicans*, seen late.
 Sweet-briar generally; earliest not seen.
 ? Swamp rose, seen late.
 ?? Beech, not seen.
 White-ash, May 12.
 Fir-balsam.
 ? Fever-bush, seen rather late.
 ?? Woodbine, not seen.
 Black shrub oak.
 Elm, young.
 ? Slippery [chn], not seen.
 Great red maples, May 13.
 Clustered andromeda, 13th.
 Young *Populus grandidentata* (large three or four days later?).
 Black oak.
 Black willow.
 ?? Sage " , seen late.
 ? Chinquapin oak.
 ?? Chestnut " , not seen.
 Celtis.
 ?? Cranberry.
 Locust, 14th.
 Nemopanthes.
 ? Witch-hazel, in our garden.
 Swamp white oak, slow.
 ? Large sugar maples, not well observed.
 White swamp-pink.

¹ *Vide* forward.

- Buttonwood.
Cornus florida.
 Panicked andromeda, not generally; several days later.
 ? Waxwork, seen but lost place.
 Pignut hickory, make a show suddenly.
 ? Mockernut hickory.
 ?? Black walnut.
 Young white oak (old 15th, slow).
Prinos verticillatus, 15th.
 ? Single-berry prinios, seen late.
 Huckleberries, black.
 N. B. — Trees generally!!
 Grape.
 Smilax.
 ?? Pinweeds, seen late, six or more inches high; the large, May 22.
 ?? Cistus, as early at least.
 Mulberry, May 16.
 ?? Carrion-flower, four or five feet long, the 31st of May.
 White spruce,¹ slow.
 Sassafras, slow.
 Lambkill.
 ?? Mountain laurel, not seen early.
 ?? *Andromeda Polifolia*, seen late.
 ? Rhodora.
 Tupelo.
 Poison-dogwood.
 Jersey tea.
Azalea nudiflora, 17th.
 Button-bush, but does not show, being few buds.
 Beach plum, 19th; *scarcely* makes any show the 24th, no more than the button-bush.
 ? Red cedar. } growth not obvious, and difference in trees; not
 White " } sure of date.
 Arbor-vitæ }
 Young hemlocks, 20th; old, 21st.
 Checkerberry, 20th, shoots just visible.

¹ ["White" is crossed out in pencil, and "black, white variety" substituted.]

? Mountain sumach, 22d.¹

? Black spruce,² 24th, hardly yet at Potter's.

Of *common* deciduous shrubs or trees, the button-bush is the latest to leaf, and, from the fewness of its buds, *i. e.* the great intervals between them, they appear later than other plants which leaf nearly at the same time. Their being subject to overflows at this season may have to do with this habit, as hardhacks, etc., under these circumstances are equally late.

Of *all* deciduous shrubs and trees the mountain sumach at Hubbard's field is the latest to leaf. I have not observed those under Fair Haven.³

The beach plum at a little distance does not make so much show of green even as the button-bush. Do the young shoots show more?

Tree-toads heard oftener, and at evening I hear a dor-bug hum past. The mouse-ear down begins to blow in fields.

May 25. 5.30 A. M. — To Hill.

Smilax. Heard and saw by the sassafras shore the rose-breasted grosbeak, a handsome bird with a loud and very rich song, in character between that of a robin and a red-eye. It sang steadily like a robin. Rose breast, white beneath, black head and above, white on shoulder and wings. The flowering ferns⁴ *just begin* to light up the meadow with their yellowish green.

¹ The 31st May it is much more forward than the button-bush at Cliffs, and perhaps started first.

² Dark variety. ³ *Vide* May 31. ⁴ Probably onoclea.

May 26. Friday. 5.30 A. M. — To climbing ivy.

Pipe-grass equisetum. Buttercups now densely spot the churchyard. Now for the fragrance of firs and spruce.

P. M. — To Walden.

Horse-radish, several days; rye four feet high. The luxuriant and rapid growth of this hardy and valuable grass is always surprising. How genial must nature be to it! It makes the revolution of the seasons seem a rapid whirl. How quickly and densely it clothes the earth! Thus early it suggests the harvest and fall. At sight of this deep and dense field all vibrating with motion and light, looking into the mass of its pale(?)—green culms, winter recedes many degrees in my memory. This the early queen of grasses with us (?). Indian corn the 2d, or later. It always impresses us at this season with a sense of genialness and bountifulness. Grasses universally shoot up like grain now, in many places deceiving with the promise of a luxuriant crop where in a few weeks they will be dry and wiry. Pastures look as if they were mowing-land. The season of grass, now everywhere green and luxuriant.

The leaves have now grown so much that it [is] difficult to see the small birds in the tree-tops, and it is too late now to survey in woods conveniently. Saw Mr. Holbrook trying an experiment on an elm this morning, which he endeavored in vain to make perpendicular last year with a brace. It was about six inches in diameter, and he had sawed it a little more than half through at about six feet from the ground and then

driven in an ashen wedge about three quarters of an inch thick on the outside. This made it perpendicular, and he was about filling it with clay and protecting it. In Nathan Stow's sprout-land every black cherry is completely stripped of leaves by the caterpillars, and they look *as if* dead, only their great triangular white nests being left in their forks. I see where a frost killed the young white oak leaves and some hickories in deep sprout-land hollows, apparently about a week ago, when the shoots were about an inch long and the leaves about the same. Evergreen-forest note still, — the first syllable three times repeated, *er-er-er*, etc., — flitting amid the tops of the pines. Some young red or scarlet (?) oaks have already grown eighteen inches, *i. e.* within a fortnight, before their leaves have two-thirds expanded. In this instance, perhaps, they have accomplished more than half their year's growth, as if, being held back by winter, their vegetative force had accumulated and now burst forth like a stream which has been dammed. They are properly called *shoots*. Gathered some small pincushion galls on a white oak. They are smaller and handsome, more colored than those I first saw on shrub oaks about a week ago. They are shaped somewhat like little bass-drum sticks with large pads, — on the end of last year's twigs. It is a globular mass composed of fine crystalline rays, somewhat like stigmas, the ground white ones, thickly sprinkled with bright-scarlet (rather than crimson) dimples. This is one of the most faery-like productions of the woods. These young white oak leaves and young leaves generally are downy, — downy-swaddled, as if for protec-

tion against frosts, etc. Are not the more tender the most downy? Why is the downy *Populus grandidentata* so much later than the other? The lint now *begins* to come off the young leaves.

The annular eclipse of the sun this afternoon is invisible on account of the clouds. Yet it seems to have created a strong wind by lowering the temperature? Yellow Bethlehem-star, a day or more; near the broom-rape.

May 27. P. M. — To Saw Mill Brook.

Geum rivale, a day or two at Hubbard's Close; also the *Rubus triflorus* abundant there along the brook next the maple swamp, and still in bloom. Wild pinks (*Silene*), apparently a day or two. The red-eye is an indefatigable singer, — a succession of short bars with hardly an interval long continued, now at 3 P. M. The pincushion galls on young white oaks and on shrub oaks are now in their prime. It is a kind of crystalline wool. Those which I have noticed on the shrub oaks are the largest, and are crimson-spotted, while those on the young white oaks are scarlet-spotted and for the most part about the size of a cranberry. They are either at the extremity of last year's twig or saddled on it midway. No fruit perhaps catches my eye more. It is remarkable that galls are apparently as early to form as the leaves to start, and that some of them are among the most beautiful products of the wood. Within small hard kernels in the midst of these I find minute white grubs. I see and hear the yellow-throated vireo. It is *somewhat* similar (its strain) to that of the red-eye,

prelia pre-li-ay, with longer intervals and occasionally a whistle like *lea flow*, or *chowy chow*, or *tully ho* (??) on a higher key. It flits about in the tops of the trees. I find the pensile nest of a red-eye between a fork of a shrub chestnut near the path. It is made, thus far, of bark and different woolly and silky materials. The arums — some of them — have bloomed probably as early as the last I saw at the Miles Swamp. *Viola pubescens* must be about out of bloom (??). *Actæa alba* fully out, the whole raceme, say two days.

I see young gooseberries as big as *small* green peas.



Is that low two or three leaved plant without stem about Saw Mill Brook a wood lettuce?

That tall swamp fern by Eb. Hubbard's Close, with fertile fronds

separate and now cinnamon-colored, perhaps a little later than the interrupted, appears to be the *cinnamomea*. Is that very wide, loose-spread fern, three or four feet high, now beginning to fruit terminally, the *spectabilis*, — a large specimen?

May 28. Sunday. The *F. hyemalis*, fox-colored sparrow, rusty grackles, tree sparrows, have all gone by; also the purple finch. The snipe has ceased (?) to boom. I have not heard the phœbe of late, and methinks the bluebird and the robin are not heard so often (the former certainly not). Those tumultuous morning concerts of sparrows, tree and song, hyemalis, and grackles, like leaves on the trees, are past, and the woodland quire will rather be diminished than in-

creased henceforth. But, on the other hand, toads and frogs and insects, especially at night, all through June, betray by the sounds they make their sensitiveness to the increasing temperature, and theirs especially is the music which ushers in the summer. Each warmer night, like this, the toads and frogs sing with increased energy, and already fill the air with sound, though the bullfrogs have not yet begun to trump in earnest. To this add the hum and creak of insects. These still herald or expect the summer. The birds do not foretell that.

12 m. — By boat to Lee's Cliff.

Larch cones are now conspicuous and handsome, — dark-crimson, about half an inch long. Pitch pine cones, too, are now handsome. The larch has a little of the sweetness of the fir, etc. Pontederias, flags, *Polygonum hydropiperoides* (just showing itself), that coarse utricularia, often floating, potamogetons, etc., etc., now begin to make a conspicuous border to the river, and its summer limits begin to be defined. Pads began to be eaten by insects as soon as they appeared, though it is still so high that I am obliged to lower my mast at the bridges. Even this spring the arches of the stone bridge were completely concealed by the flood, and yet at midsummer I can sail under them without lowering my mast, which is []¹ feet high from the bottom of the boat. Critchicrotches have been edible some time in some places. It must be a kind of water milfoil, whose leaves I now see variously divided under water, and some nearly two feet long.²

¹ [A blank space left here.]

² Probably *Sium*.

At the *old* bridge at the hill, the water being quite smooth, I saw a water-bug cross straight from the south to the north side, about six rods, furrowing the water in a waving line, there being no other insects near him on the surface. It took but about a minute. It was an interesting sight, proving that this little insect, whose eyes are hardly raised above the plane of the water, sees, or is cognizant of, the opposite shore. I have no doubt that they cross with ease and rapidity lakes a mile wide. It looked like an adventurous voyage for it. Probably he is in danger from fishy monsters, — though it must be difficult for a fish to catch one.

I see the exuviae or cases of some insects on the stems of water plants above the surface. The large devil's-needles are revealed by the reflection in the water, when I cannot see them in the air, and at first mistake them for swallows. Broom-rape, perhaps yesterday. Thimble-berry out, — at Lee's Cliff day before yesterday at least. Distinguished by the downy under sides of its leaves. I see those large, thin, transparent radical heart(?) leaves¹ floating on the surface, as if bitten off by some creature. I see breams' nests which have been freshly cleared out and are occupied. The *red* choke-berry is fully out, and I do not know but it is as early as the black. Red clover at Clamshell, a day or two. Saw that common snake *Coluber eximius* of De Kay, — checkered adder, etc., etc., — forty-one inches long. A rather light brown above, with large dark-brown, irregularly quadrangular blotches, mar-

¹ *Nuphar Kalmiana*.

gined with black, and similar small ones, on the sides; abdomen light salmon-white, — whitest toward the head, — checkered with quadrangular blotches; very light bluish-slate in some lights and dark-slate or black in others. Abdominal plates 201, caudal scales 45. I should think from Storer's description that his specimen had lost its proper colors in spirits. He describes not the colors of a living snake, but those which alcohol might impart to it(?). It is as if you were to describe the white man as very red in the face, having seen a drunkard only.

The huckleberries, excepting the late, are now generally in blossom, their rich clear red contrasting with the light-green leaves; frequented by honey-bees, full of promise for the summer. One of the great crops of the year. The blossom of the *Vaccinium vacillans* is larger and paler, but higher-colored on one side and more transparent(?), less concealed by leaves. These are the blossoms of the *Vaccinieæ*, or Whortleberry Family, which affords so large a proportion of our berries. The crop of oranges, lemons, nuts, and raisins, and figs, quinces, etc., etc., not to mention tobacco and the like, is of no importance to us compared with these. The berry-promising flower of the *Vaccinieæ*. This crop grows wild all over the country, — wholesome, bountiful, and free, — a real ambrosia (one is called *V. Vitis-Idæa*, Vine of Mt. Ida), — and yet men — the foolish demons that they are — devote themselves to culture of tobacco, inventing slavery and a thousand other curses as the means, — with infinite pains and inhumanity go raise tobacco all their lives. Tobacco

is the staple instead of huckleberries. Wreaths of tobacco smoke go up from this land, the incense of a million sensualists. With what authority can such distinguish between Christians and Mahometans?

Finding the low blackberry nearly open, I looked long and at last, where the vine ran over a rock on the south hillside, the reflected heat had caused it [to] open fully its large white blossoms. In such places, apparently yesterday. The high blackberry in similar places, at least to-day. At these rocks I hear a sharp *peep*, — methinks of a peewee dashing away. Four pale-green (?) eggs, finely sprinkled with brown, in a brown thrasher's nest, on the ground (!) under a barberry bush. The night-warbler, after his strain, drops down almost perpendicularly into a tree-top and is lost. The crickets, though it is everywhere an oppressively warm day (yesterday I had a fire!!) and I am compelled to take off my thinnish coat, are heard, particularly amid the rocks at Lee's Cliff. They must love warmth. As if it were already autumn there. White clover under the rocks. I see the ebony spleenwort full-grown. The pitch pines are *rather* past bloom here, — the cobwebs they contain yellowed with their dust, — probably generally in bloom elsewhere. *Turritis stricta*, apparently out of bloom. Young wild cherry under rocks, fully out two or three days; generally or elsewhere not quite out; probably will *begin* to-morrow.

It would be worth the while to ask ourselves weekly, Is our life innocent enough? Do we live *inhumanely*, toward man or beast, in thought or act? To be serene

and successful we must be at one with the universe. The least conscious and needless injury inflicted on any creature is to its extent a suicide. What peace — or life — can a murderer have?

Fair Haven Cliffs.

The lint has begun to come off the young leaves. The birches are still the darkest green to be seen in large masses, except evergreens. The last begin to be less conspicuous, beginning to be lost in the sea of verdure. The shrub oak plain is now fairly greened again, only slightly tinged with redness here and there, where are the youngest white oak leaves.

As I sail down toward the Clamshell Hill about an hour before sunset, the water is smoothed like glass, though the breeze is as strong as before. How is this? Yet I have not seen much smooth water this spring. I think the fall must be the time. The rounded green hills are very fair and clysian. The low clumps of bushes on their sides, just clothed with tender verdure, look like islets half sunk and floating in a cool sea of grass. They do not stand, but float on the cool glaucous swells. Though the grass is really short and thin there. Whole schools of fishes leap out of water at once with a loud plashing, even many rods distant, scared by my sail. Cracks in the earth are still visible, and hips of the late rose still hold on under water in some places.

The inhumanity of science concerns me, as when I am tempted to kill a rare snake that I may ascertain its species. I feel that this is not the means of acquiring true knowledge.

May 29. Monday. P. M. — To Cedar Swamp by Assabet.

The white maple keys have begun to fall and float down the stream like the wings of great insects. Dandelions and mouse-ear down have been blowing for some time and are seen on water. These are interesting as methinks the first of the class of downy seeds which are more common in the fall. There are myriads of shad-flies fluttering over the dark and still water under the hill, one every yard or two, continually descending, almost falling, to the surface of the water as if to drink and then, with perhaps a little difficulty, rising again, again to fall upon it, and so on. I see the same one fall and rise five or six feet thus four or five times; others rise *much* higher; and now comes along a large dragon-fly and snatches one. This two or three times. Other smaller insects, light-colored, are fluttering low close to the water, and in some places are swarms of small black moths. *Viburnum Lentago* in a warm place. The choke-cherry is leaving off to bloom, now that the black cherry is beginning. The clustered andromeda is not yet fully, *i. e.* abundantly, out. The tall huckleberry in swamps is well out. In the longitudinal crevices of the white cedar bark there is much clear yellow resin. Raspberry, probably yesterday, side of railroad, above red house. See a purple finch and hear him, — robin-like and rich warbling. S. Barrett thinks that many chubs are killed at mills, and hence are seen floating. I see no stone-heaps distinctly formed yet.

Saw what I thought my night-warbler, — sparrow-

like with chestnut (?) stripes on breast, white or whitish below and about eyes, and perhaps chestnut (??) head.

Stellaria longifolia, apparently apetalous (!), ten or twelve inches high, will soon open on the bank near the *Ranunculus abortivus*.

These days it is left to one Mr. Loring to say whether a citizen of Massachusetts is a slave or not. Does any one think that Justice or God awaits Mr. Loring's decision? Such a man's existence in this capacity under these circumstances is as impertinent as the gnat that settles on my paper. We do not ask him to make up his mind, but to make up his pack. Why, the United States Government never performed an act of justice in its life! And this unoffending citizen is held a prisoner by the United States soldier, of whom the best you can say is that he is a fool in a painted coat. Of what use a Governor or a Legislature? they are nothing but politicians. I have listened of late to hear the voice of a Governor, Commander-in-Chief of the forces of Massachusetts. I heard only the creaking of the crickets and the hum of the insects which now fill the summer air. The Governor's exploit is to review the troops on muster-days. I have seen him on horseback, with his hat off, listening to a chaplain's prayer. That is all I have ever seen of a Governor. I think that I could manage to get along without one. When freedom is most endangered, he dwells in the deepest obscurity. A distinguished clergyman once told me that he chose the profession of a clergyman because it afforded the most leisure for literary pur-

suits. I would recommend to him the profession of a Governor. I see the papers full of soft speeches of the mayor and the Governor and brother editors. I see the Court-House full of armed men, holding prisoner and trying a MAN, to find out if he is not really a SLAVE. It is a question about which there is great doubt.¹

It is really the trial of Massachusetts. Every moment that she hesitates to set this man free, she is convicted. The Commissioner on her case is God.² Perhaps the most saddening aspect of the matter is the tone of almost all the Boston papers, connected with the fact that they are and have been of course sustained by a majority of their readers. They are feeble indeed, but only as sin compared with righteousness and truth. They are eminently time-serving. I have seen only the *Traveller*, *Journal*, and *Post*. I never look at them except at such a time as this. Their life is abject even as that of the marines. Men in any office of government are everywhere and forever politicians. Will mankind never learn that policy is not morality, that it never secures any moral right, but always considers merely what is "expedient," — chooses the available candidate, who, when moral right is concerned, is always the devil? Witness the President of the United States. What is the position of Massachusetts? (Massachusetts-it!) She leaves it to a Mr. Loring to decide whether one of her citizens is a freeman or a slave. What is the value of such a SHE'S FREEDOM AND

¹ [*Cape Cod, and Miscellanies*, pp. 389, 390; *Misc.*, Riv. 172, 173.]

² [*Cape Cod, and Miscellanies*, p. 394; *Misc.*, Riv. 178.]

PROTECTION to me? Perhaps I shall so conduct that she will one day offer me the FREEDOM OF MASSACHUSETTS in a gold casket, — made of California gold in the form of a court-house, perchance. I spurn with contempt any bribe which she or her truckling men can offer. I do not vote at the polls. I wish to record my vote here. Men profess to be surprised because the devil does not behave like an angel of light. The majority of the men of the North, and of the South and East and West, are not men of principle. If they vote, they do not send men to Congress on errands of humanity; but, while their brothers and sisters are being scourged and hung for loving liberty, while (insert here all the inhumanities that pandemonium can conceive of), it is the mismanagement of wood and iron and stone and gold which concerns them. Do what you will, O Government, with my mother and brother, my father and sister, I will obey your command to the letter. It will, indeed, grieve me if you hurt them, if you deliver them to overseers to be hunted by hounds, and to be whipped to death; but, nevertheless, I will peaceably pursue my chosen calling on this fair earth, until, perhaps, one day I shall have persuaded you to relent. Such is the attitude, such are the words of Massachusetts. Rather than thus consent to establish hell upon earth, — to be a party to this establishment, — I would touch a match to blow up earth and hell together. As I love my life, I would side with the Light and let the Dark Earth roll from under me, calling my mother and my brother to follow me.¹

¹ [*Cape Cod, and Miscellanies*, pp. 400, 401; *Misc.*, Riv. 186, 187.]

May 30. Tuesday. Whiteweed. *Spergularia rubra*, apparently a day or two, side of railroad above red house. Yarrow.

P. M. — To Clintonia Swamp and Pond.

Saw a black snake, dead, four feet three inches long, slate-colored beneath. Saw what was called a California cat which a colored man brought home from California, — an animal at least a third smaller than a cat and shaped more like a polecat or weasel, brown-gray, with a cat-like tail of alternate black and white rings, very large ears, and eyes which were prominent, long body like a weasel, and sleeps with its head between its fore paws, curling itself about; a rank smell to it. It was lost several days in our woods, and was caught again in a tree about a crow's nest.

Ranunculus repens, perhaps a day or two; channelled peduncle and spreading calyx and conspicuously spotted leaves. The leaves of the tall buttercup are much larger and finely cut and, as it were, peltate. Pickerel are not easily detected, — such is their color, — as if they were transparent. Vetch. I see now green high blueberries, and gooseberries in Hubbard's Close, as well as shad-bush berries and strawberries. In this dark, cellar-like maple swamp are scattered at pretty regular intervals tufts of green ferns, *Osmunda cinnamomea*, above the dead brown leaves, broad, tapering fronds, curving over on every side from a compact centre, now three or four feet high. Wood frogs skipping over the dead leaves, whose color they resemble. Clintonia. Medeola. The last may be earlier. I am surprised to find arethusas abundantly out in Hub-

bard's Close, maybe two or three days, though not yet at Arethusa Meadow, probably on account of the recent freshet. It is so leafless that it shoots up unexpectedly. It is all color, a little hook of purple flame projecting from the meadow into the air. Some are comparatively pale. This high-colored plant shoots up suddenly, all flower, in meadows where it is wet walking. A superb flower. Cotton-grass here also, probably two or three days for the same reason. *Eriophorum polystachyon* var. *latifolium*, having rough peduncles.

The twigs of the dwarf willow, now gone to seed, are thickly invested with cotton, containing little green seed-vessels, like excrement of caterpillars, and the shrubs look at a little distance like sand cherries in full bloom. These are among the downy seeds that fly.

Found a ground-robin's nest, under a tuft of dry sedge which the winter had bent down, in sprout-land on the side of Heywood Peak, perfectly concealed, with two whitish eggs very thickly sprinkled with brown; made of coarse grass and weed stems and lined with a few hairs and stems of the mahogany moss.

The pink is certainly one of the finest of our flowers and deserves the place it holds in my memory. It is now in its prime on the south side of the Heywood Peak, where it grows luxuriantly in dense rounded tufts or hemispheres, raying out on every side and presenting an even and regular surface of expanded flowers. I count in one such tuft, of an oval form twelve inches by eight, some three hundred fully open

and about three times as many buds, — more than a thousand in all. Some tufts consist wholly of white ones with a very faint tinge of pink. This flower is as elegant in form as in color, though it is not fragrant. It is associated in my mind with the first heats of summer, or [those] which announce its near approach. Few plants are so worthy of cultivation. The shrub oak pin-cushion (?) galls are larger, whiter, and less compact than those of the white oak. I find the *linnaea*, and budded, in Stow's Wood by Deep Cut.

Sweet flag. Waxwork to-morrow.¹ I see my umbrella toadstool on the hillside has already pierced the ground.

May 31. Old Election. Cold weather. Many go a-fishing to-day in earnest, and one gets forty pouts in river. Locust.

P. M. — To Miles Meadow by boat.

A cold southeast wind. Blue-eyed grass, apparently in pretty good season. Saw a greater telltale, and this is the only one I have seen probably; distinguished by its size. It is very watchful, but not timid, allowing me to come quite near, while it stands on the lookout at the water's edge. It keeps nodding its head with an awkward jerk, and wades in the water to the middle of its yellow legs; goes off with a loud and sharp *phe phe phe phe*, or something like that. It acts the part of the telltale, though there are no birds here, as if [it] were with a flock. Remarkable as a sentinel for other birds. I think I see a few clams come up. The

¹ June 1st.

mountain sumach at the Cliffs is much more forward than at Hubbard's, and perhaps is earlier to leaf than the button-bush. Alternate cornel, apparently yesterday. Cockspur thorn is well out; how long?

Maidenhair fern, how handsome!