

## VIII

APRIL, 1855

(ÆT. 37)

*April 1.* The month comes in true to its reputation. We wake, though late, to hear the sound of a strong, steady, and rather warm rain on the roof, and see the puddles shining in the road. It lasts till the middle of the day, and then is succeeded by a cold northwest wind. This pattering rain and Sabbath morning combined make us all sluggards.

When I look out the window I see that the grass on the bank on the south side of the house is already much greener than it was yesterday. As it cannot have grown so suddenly, how shall I account for it? I suspect that the reason is that the few green blades are not merely washed bright by the rain, but erect themselves to imbibe its influence, and so are more prominent, while the withered blades are beaten down and flattened by it. It is remarkable how much more fatal to all superficial vegetation or greenness is a morning frost in March than a covering of snow or ice. In hollows where the ice is still melting I see the grass considerably green about its edges, though further off it shows no sign of life.

P. M. — To Conantum End.

This rain will help take the frost out of the ground.

At the first Conantum Cliff I am surprised to see how much the columbine leaves have grown in a sheltered cleft; also the cinquefoil, dandelion (?), yarrow (?), sorrel, saxifrage, etc., etc. They seem to improve the least warmer ray to advance themselves, and they hold all they get. One of the earliest-looking plants in water is the golden saxifrage.

The last half of last month was cold and windy, — excepting the 19th, — wind northwest, west, and southwest. It at last ceased to be chilling the 29th and 30th, which were fine clear, cool, but windy days; on the 30th a slight haze; then the 31st was suddenly warm with a thick haze, thawing man and earth; and this succeeded by to-day's rain.

See, resting on the edge of the ice in Fair Haven Pond, a white duck with black head, and a dark one. They take to the water when I appear on the hill a quarter of a mile off, and soon fly down the river rather low over the water. Were they not the same with those of the 16th *ult.*?

*April 2.* Not only the grass but the pines also were greener yesterday for being wet. To-day, the grass being dry, the green blades are less conspicuous than yesterday. It would seem, then, that this color is more vivid when wet, and perhaps all green plants, like lichens, are to some extent greener in moist weather. Green is essentially *vivid*, or the color of life, and it is therefore most brilliant when a plant is moist or most alive. A plant is said to be green in opposition to being withered and dead. The word, according to

Webster, is from the Saxon *grene*, to grow, and hence is the color of herbage when growing.

High winds all night, rocking the house, opening doors, etc. To-day also. It is wintry cold also, and ice has formed nearly an inch thick in my boat.

P. M. — Down the river-bank.

The wind is still very strong and cold from the northwest, filling the air with dust and blowing the water, which has slightly risen, over the rocks and bushes along the shore, where it freezes in the shape of bulls' horns about the osiers, making coarse rakes with its dependent icicles when the osiers are horizontal, also turtle-shells over the rocks. It is just such a wind and freezing as that of last March (18th, I think), and, if the meadow were flooded, there would probably be as much ice as then on the bushes. There may be wind enough for this phenomenon in the winter, but then there is no open water to be blown.

*April 3.* It is somewhat warmer, but still windy, and—

P. M. — I go to sail down to the Island and up to Hubbard's Causeway.

Most would call it cold to-day. I paddle without gloves. It is a coolness like that of March 29th and 30th, pleasant to breathe, and, perhaps, like that, presaging decidedly warmer weather. It is an amelioration, as nature does nothing suddenly. The shores are lined with frozen spray-like foam, with an abrupt edge, a foot high often on the waterside. Occasionally where there [are] twigs there is a nest of those

short, thick bulls'-horn icicles, pointing in every direction. I see many hens feeding close to the river's edge, like the crows, — and robins and blackbirds later, — and I have no doubt they are attracted by a like cause. The ground being first thawed there, not only worms but other insect and vegetable life is accessible there sooner than elsewhere. See several pairs of ducks, mostly black.

Returning, when off the hill was attracted by the noise of crows, which betrayed to me a very large hawk (?), large enough for an eagle, sitting on a maple beneath them. Now and then they dived at him, and at last he sailed away low round the hill, as if hunting. The hillside was alive with sparrows, red-wings, and the first grackles<sup>1</sup> I have seen. I detected them first by their more rasping note, — or was that a crow blackbird? — after a short stuttering, then a fine, clear whistle.

*April 4.* A fine morning, still and bright, with smooth water and singing of song and tree sparrows and some blackbirds. A nuthatch is heard on the elms, and two ducks fly upward in the sun over the river.

P. M. — To Clematis Brook *via* Lee's.

A pleasant day, growing warmer; a slight haze. Now the hedges and apple trees are alive with fox-colored sparrows, all over the town, and their imperfect strains are occasionally heard. Their clear, fox-colored backs are very handsome. I get quite near to them. Stood quite near to what I called a hairy

<sup>1</sup> [That is, rusty grackles, or rusty blackbirds.]

woodpecker — but, seeing the downy afterward, I am in doubt about it. Its body certainly as big as a robin. It is a question of size between the two kinds. The rows of white spots near the end of the wings of the downy remind me of the lacings on the skirts of a soldier's coat. Talked with Daniel Garfield near the old house on Conantum. He was going to see if his boat was in order for fishing. Said he had been a-fishing as early as this and caught perch, etc., with a worm. He had often caught shiners in Fair Haven Pond through the ice in March, and once a trout in deep water off Baker's steep hill, which weighed two pounds, his lines having been left in over night. He had also often caught the little perch in White Pond in midwinter for bait. Sees trout and sucker running up brooks at this season and earlier, and thinks they go out of them in the fall, but not out of the river. Does not know where they go to.

I am surprised to [find] the pond, *i. e.* Fair Haven Pond, not yet fully open. There is [a] large mass of ice in the eastern bay, which will hardly melt tomorrow.<sup>1</sup>

It is a fine air, but more than tempered by the snow in the northwest. All the earth is bright; the very pines glisten, and the water is a bright blue. A gull is circling round Fair Haven Pond, seen white against the woods and hillsides, looking as if it would dive for a fish every moment, and occasionally resting on the ice. The water above Lee's Bridge is all alive with ducks. There are many flocks of eight or ten together,

<sup>1</sup> The rain of the 5th, P. M., must have finished it.

their black heads and white breasts seen above the water, — more of them than I have seen before this season, — and a gull with its whole body above the water, perhaps standing where it was shallow. Not only are the evergreens brighter, but the pools, as that upland one behind Lee's, the ice as well as snow about their edges being now completely melted, have a peculiarly warm and bright April look, as if ready to be inhabited by frogs.

I can now put a spade into the garden anywhere. The rain of April 1st and the warmth of to-day have taken out the frost there; but I cannot put a spade into banks by the meadow where there is the least slope to the north.

Returning from Mt. Misery, the pond and river-reach presented a fine, warm view. The slight haze, which on a warmer day at this season softens the rough surfaces which the winter has left and fills the copses seemingly with life, — makes them appear to teem with life, — made the landscape remarkably fair. It would not be called a warm, but a pleasant day; but the water has crept partly over the meadows, and the broad border of button-bushes, etc., etc., off Wheeler's cranberry meadow, low and nearly flat, though sloping regularly from an abrupt curving edge on the river-side several rods into the meadow till it is submerged — this is isolated, but at this distance and through this air it is remarkably soft and elysian. There is a remarkable variety in the view at present from this summit. The sun feels as warm as in June on my ear. Half a mile off in front is this elysian water, high over which

two wild ducks are winging their rapid flight eastward through the bright air; on each side and beyond, the earth is clad with a warm russet, more pleasing perhaps than green; and far beyond all, in the north-western horizon, my eye rests on a range of snow-covered mountains, glistening in the sun.

*April 5. Fast-Day. 9 A. M.* — To Sudbury line by boat.

A still and rather warm morning, with a very thick haze concealing the sun and threatening to turn to rain.

It is a smooth, April-morning water, and many sportsmen are out in their boats. I see a pleasure-boat, on the smooth surface away by the Rock, resting lightly as a feather in the air.

Scare up a snipe close to the water's edge, and soon after a hen-hawk from the Clamshell oaks. The last looks larger on his perch than flying. The snipe too, then, like crows, robins, blackbirds, and hens, is found near the waterside, where is the first spring (*e. g.* alders and white maples, etc., etc.), and there too especially are heard the song and tree sparrows and pewees, and even the hen-hawk at this season haunts there for his prey. Inland, the groves are almost completely silent as yet. The concert of song and tree sparrows at willow-row is now very full, and their different notes are completely mingled. See a single white-bellied swallow dashing over the river. He, too, is attracted here by the early insects that begin to be seen over the water. It being Fast-Day, we on the water hear the loud and musical sound of bells

ringing for church in the surrounding towns. It is a sober, moist day, with a circle round the sun, which I can only see in the reflection in the water.

The river appears to have risen still last night, owing to the rain of the 1st, and many spring cranberries are washed together at last, and now many new seeds, apparently of sedges, are loosened and washed up. Now that for the most part it is melted quite to its edge, and there is no ice there, the water has a warmer, April look close under my eye. Now is the first time this year to get spring cranberries. In many places now the river wreck is chiefly composed of *Juncus militaris*. Was it so in fall?

There is a strong muskrat scent from many a shore. See a muskrat floating, which may have been drowned when the river was so high in midwinter, — for this is the second I have seen, — with the rabbit. I saw yesterday a yellow-spot and see to-day a painted tortoise, already out on the bank on a tuft of grass. The muskrat-hunter sits patiently with cocked gun, waiting for a muskrat to put out his head amid the button-bushes. He gets half a dozen in such a cruise. Bushed our boat with hemlock to get near some ducks, but another boat above, also bushed, scared them. Heard from one half-flooded meadow that low, general, hard, stuttering *tut tut tut* of frogs (?), — the awakening of the meadow.

Hear the cry of the peacock again.

By 4 P. M. it began to rain gently or mizzle. Saw this forenoon a great many of those little fuzzy gnats in the air.

*April 6.* It clears up at 8 P. M. warm and pleasant, leaving flitting clouds and a little wind, and I go up the Assabet in my boat. The blackbirds have now begun to frequent the water's edge in the meadow, the ice being sufficiently out. The April waters, smooth and commonly high, before many flowers (none yet) or any leafing, while the landscape is still russet and frogs are just awakening, is [*sic*] peculiar. It began yesterday. A very few white maple stamens stand out already loosely enough to blow in the wind, and some alder catkins look almost ready to shed pollen. On the hillsides I smell the dried leaves and hear a few flies buzzing over them. The banks of the river are alive with song sparrows and tree sparrows. They now sing in advance of vegetation, as the flowers will blossom, — those slight tinkling, twittering sounds called the singing of birds; they have come to enliven the bare twigs before the buds show any signs of starting. I see a large wood tortoise just crawled out upon the bank, with three oval, low, bug-like leeches on its sternum.

You can hear all day, from time to time in any part of the village, the sound of a gun fired at ducks. Yesterday I was wishing that I could find a dead duck floating on the water, as I had found muskrats and a hare, and now I see something bright and reflecting the light from the edge of the alders five or six rods off. Can it be a duck? I can hardly believe my eyes. I am near enough to see its green head and neck. I am delighted to find a perfect specimen of the *Mergus merganser*, or goosander, undoubtedly shot yesterday by the Fast-Day sportsmen, and I take a small flat-

tened shot from its wing, — flattened against the wing-bone, apparently. The wing is broken, and it is shot through the head.<sup>1</sup> It is a perfectly fresh and very beautiful bird, and as I raise it, I get sight of its long, slender vermilion bill (color of red sealing-wax) and its clean, bright-orange legs and feet, and then of its perfectly smooth and spotlessly pure white breast and belly, tinged with a faint salmon (or tinged with a delicate buff inclining to salmon).

This, according to Wilson, is one of the mergansers, or fisher ducks, of which there are nine or ten species and we have four in America. It is the largest of these four; feeds almost entirely on fin and shell fish; called water pheasant, sheldrake, fisherman diver, dun diver, sparkling fowl, harle, etc., as well as goosander. Go in April, return in November. Jardine has found seven trout in one female. Nuttall says they breed in the Russian Empire and are seen in Mississippi and Missouri in winter. He found a young brood in Pennsylvania. Yarrell says they are called also saw-bill and jack-saw; are sometimes sold in London market. Nest, according to Selby, on ground; according to others, in a hollow tree also. Found on the continent of Europe, northern Asia, and even in Japan (?). Some breed in the Orkneys and thereabouts.<sup>2</sup> My bird is 25½ inches long and 35 in alar extent; from point of wing to end of primaries, 11 inches.

<sup>1</sup> The chief wound was in a wing, which was broken. I afterward took three small shot from it, which were flattened against the bill's base and perhaps (?) the quills' shafts.

<sup>2</sup> *Vide* [p. 290].

It is a great diver and does not mind the cold. It appears admirably fitted for diving and swimming. Its body is flat, and its tail short, flat, compact, and wedge-shaped; its eyes peer out a slight slit or semi-circle in the skin of the head; and its legs are flat and thin in one direction, and the toes shut up compactly so as to create the least friction when drawing them forward, but their broad webs spread them three and a half inches when they take a stroke. The web is extended three eighths of an inch beyond the inner toe of each foot.<sup>1</sup> There are very conspicuous black teeth-like serrations along the edges of its bill, and this also is roughened so that it may hold its prey securely.

The breast *appeared* quite dry when I raised it from the water.

The head and neck are, as Wilson says, black, glossed with green, but the lower part of the neck pure white, and these colors bound on each other so abruptly that one appears to be sewed on to the other.

It is a perfect wedge from the middle of its body to the end of its tail, and it is only three and a quarter inches deep from back to breast at the thickest part, while the greatest breadth horizontally (at the root of the legs) is five and a half inches. In these respects it reminds me of an otter, which however I have never seen.

I suspect that I have seen near a hundred of these birds this spring, but I never got so near one before. In Yarrell's plate the depth of the male goosander

<sup>1</sup> *Vide* the 9th of April.

is to its length (*i. e.* from tip of tail to most forward part of breast) as thirty-seven to one hundred and three, or the depth is more than one third. This length in Yarrell's bird, calling the distance from the point of the wing to the end of the primaries eleven inches, is about fourteen and a half inches, of which my three and a quarter is not one fourth. In Nuttall's plate the proportion is thirty-two to ninety-one, also more than one third. I think they have not represented the bird flat enough.

Yarrell says it is the largest of the British mergansers; is a winter visitor, though a few breed in the north of Britain; are rare in the southern counties. But, according to Yarrell, a Mr. Low in his Natural History of Orkney says they breed there, and, after breeding, the sexes separate; and Y. quotes Selby as saying that their nest is near the edge of the water, of grass, roots, etc., lined with down, sometimes among stones, in long grass, under bushes, or in a stump or hollow tree. Y. continues, egg "a uniform buff white," two and a half inches long. Sometimes carry their young on their backs in the water. It is common in Sweden and, according to the traveller Acerbi, in Lapland they give it a hollow tree to build in and then steal its eggs. The mother, he adds, carries her young to the water in her bill. Y. says it is well known in Russia and is found in Germany, Holland, France, Switzerland, Provence, and Italy. Has been seen near the Caucasus (and is found in Japan, according to one authority). Also in North America, Hudson's Bay, Greenland, and Iceland.

*April 7.* In my walk in the afternoon of to-day, I saw from Conantum, say fifty rods distant, two shel-drakes, male and probably female, sailing on A. Wheeler's cranberry meadow. I saw only the white of the male at first, but my glass revealed the female. The male is easily seen a great distance on the water, being a large white mark. But they will let you come only within some sixty rods ordinarily. I observed that they were uneasy at sight of me and began to sail away in different directions. I could plainly see the vermilion bill of the male and his orange legs when he flew (but he *appeared* all white above), and the reddish brown or sorrel of the neck of the female, and, when she lifted herself in the water, as it were preparatory to flight, her white breast and belly. She had a grayish look on the sides. Soon they approached each other again and seemed to be conferring, and then they rose and went off, at first low, down-stream, soon up-stream a hundred feet over the pond, the female leading, the male following close behind, the black at the end of his curved wings very conspicuous. I suspect that about all the conspicuous white ducks I see are goosanders.

I skinned my duck yesterday and stuffed it to-day. It is wonderful that a man, having undertaken such an enterprise, ever persevered in it to the end, and equally wonderful that he succeeded. To skin a bird, drawing backward, wrong side out, over the legs and wings down to the base of the mandibles! Who would expect to see a smooth feather again? This skin was very tender on the breast. I should have done better had I stuffed it at once or turned it back before the

skin became stiff. Look out not to cut the ear and eyelid.

But what a pot-bellied thing is a stuffed bird compared even with the fresh dead one I found! It looks no longer like an otter, like a swift diver, but a mere waddling duck. How perfectly the vent of a bird is covered! There is no mark externally.

At six this morn to Clamshell. The skunk-cabbage open yesterday, — the earliest flower this season. I suspect that the spathes do not push up in the spring. This is but three inches high. I see them as high and higher in the fall, and they seem only to acquire color now and gape open. I see but one out, and that sheds pollen abundantly.

See thirty or forty goldfinches in a dashing flock, in all respects (notes and all) like lesser redpolls, on the trees by Wood's Causeway and on the railroad-bank. There is a general twittering and an occasional mew. Then they alight on the ground to feed, along with *F. hyemalis* and fox-colored sparrows. They are merely olivaceous above, dark about the base of the bill, but bright lemon-yellow in a semicircle on the breast; black wings and tails, with white bar on wings and white vanes to tail. I never saw them here so early before; or probably one or two olivaceous birds I have seen and heard of other years were this.

Clear, but a cold air.

What is [the] cockroach(?) -like black beetle with a colored edge (blue?) on pebbles, like cicindelas?



P. M. — To Hubbard's Close and Lee's Cliff.

A mouse-nest of grass, in Stow's meadow east of railroad, on the surface. Just like those seen in the rye-field some weeks ago, but this in lower ground has a distinct gallery running from it, and I think is the nest of the meadow mouse. The pool at Hubbard's Close, which was full of ice, unbroken gray ice, the 27th of March, is now warm-looking water, with the slime-covered callitriche standing a foot high in it; and already a narrow grass, the lake grass, has sprung up and lies bent nine or ten inches flat on the water. This is very early as well as sudden. In ten days there has been this change. How much had that grass grown under the ice? I see many small skaters (?) in it. Saw a trout as long as my finger, in the ditch dug from Brister's Spring, which, having no hole [or] overhanging bank where it could hide, plunged into the mud like a frog and was concealed. The female flowers of the hazel are just beginning to peep out.

At Lee's Cliff I find the radical leaves of the early saxifrage, columbine, and the tower mustard, etc., much eaten apparently by partridges and perhaps rabbits. They must have their greens in the spring, and earlier than we. Below the rocks, the most obviously forward radical leaves are the columbine, tower mustard (lanceolate and petioled and remotely toothed), and catnep, and mullein. Early crowfoot, the buttercup (*bulbosa*), is a peculiarly sappy, dark pickle-green, decided spring, and none of your sapless evergreens. The little thyme-leaved arenaria, I believe it is, which is evergreen, and some other minute leaves, also,

already green the ground. The saxifrage on the rocks will apparently open in two days; it shows some white. The grass is now conspicuously green about open springs in dense tufts. The frozen sod, partly thawed in low grounds, sinks under me as I walk.

*April 8. 6 A. M.* — Up Assabet.

A fine clear morning. The ground white with frost, and all the meadows also, and a low mist curling over the smooth water now in the sunlight, which gives the water a silver-plated look. The frost covers the willows and alders and other trees on the sides of the river fifteen or twenty feet high. Quite a wintry sight. At first I can hardly distinguish white maple stamens from the frost spiculæ. I find some anthers effete and dark, and others still mealy with pollen. There are many in this condition. The crimson female stigmas also peeping forth. It evidently began to shed pollen yesterday. I find also at length a single catkin of the *Alnus incana*, with a few stamens near the peduncle discolored and shedding a little dust when shaken; so this must have begun yesterday, I think, but it is not so forward as the maple. Though I have looked widely, I have not found the alder out before.

I see some long cobweb lines covered with frost, hanging from tree to tree, six feet in one case, like the ropes which extend from mast to mast of a vessel. Very thin dark ice-crystals over shallowest water, showing the flat pyramids. Hear and see a pigeon woodpecker, something like *week-up week-up*. The robins now sing in full blast.

Also song sparrows and tree sparrows and *F. hyemalis* are heard in the yard. The fox-colored sparrow is also there. The tree sparrows have been very musical for several mornings, somewhat canary-like. As to which are the earliest flowers, it depends on the character of the season, and ground bare or not, meadows wet or dry, etc., etc., also on the variety of soils and localities within your reach. The columbine leaves in the clefts of Cliffs are one of the very earliest obvious growths. I noticed it the first of April. The radical leaves of the buttercup now at Lee's Cliff — a small flat dense circle — are a very different color from those evergreen leaves seen when the snow first goes off. They are emphatically a *green* green, as if a sort of green fire were kindled under them in the sod. The buds not only of lilacs, but white birches, etc., look swollen.

When taking the brain out of my duck yesterday, I perceived that the brain was the marrow of the head, and it is probably only a less sentient brain that runs down the backbone, — the spinal marrow.

Abiel Wheeler tried to plow in sandy soil yesterday, but could not go beyond a certain depth because of frost.

*P. M.* — Up Assabet to G. Barrett's meadow.

This forenoon it was still and the water smooth. Now there is a strong cool wind from the east. Am surprised to see a sound clam close to the shore at mouth of Dakin's Brook, in one foot of water. A school of small minnows. Already a turtle's track on sand close

to water. The great buff-edged butterfly flutters across the river. Afterward I see a small red one over the shore.

Though the river — excepting Fair Haven Pond before the 6th — has for a week been completely free of ice, and only a little thin crystalwise forms in the night in the shallowest parts, that thick ice of the winter (February) on the meadows, covered by pieces of meadow-crust, is in many places still nearly as thick as ever, now that ice is a rather rare sight and plowing is beginning. It is remarkable how long this frozen meadow-crust lying on it has preserved it. Where the piece of meadow is only three or four feet in diameter, its edges now project over the ice, so that the whole looks like a student's four-cornered cap, — or that which the President of Harvard wears. All that mass on B.'s meadow appears to have been taken from the upper part of the meadow near the road, about thirty rods off from where it now lies. In the ditches near which it was taken up I see the coarse yellow, reddened, and sometimes already green-tipped pads of the yellow lily, partly unrolled at the bottom of the warm water, the most of a spring growth, perhaps, in the water; also two or three good-sized buds of a healthy green.

Hear at a distance in the sprout-lands the croaks of frogs from some shallow pool. Saw six muskrats' bodies, just skinned, on the bank, — two large yellowish, fatty-looking masses of (I suppose) musk on each side the lower part of the abdomen. Every part of the animal now emits a very strong scent of musk. A foot which I brought home (together with a head)

scented me all over. The fore feet are small and *white* on the palm, while the hind ones are *black*. All the skin being stripped off except on the nose and feet, the fore feet look like hands clothed in gauntlets of fur.

This evening, about 9 P. M., I hear geese go over, now there in the south, now southeast, now east, now northeast, low over the village, but not seen. The first I have heard.

*April 9.* 5.15 A. M. — To Red Bridge just before sunrise.

Fine clear morning, but still cold enough for gloves. A slight frost, and mist as yesterday curling over the smooth water. I see half a dozen crows on an elm within a dozen rods of the muskrats' bodies, as if eying them. I see thus often crows very early in the morning near the houses, which soon after sunrise take their way across the river to the woods again. It is a regular thing with them.

Hear the hoarse rasping *chuck* or chatter of crow blackbirds and distinguish their long broad tails. Wilson says that the only note of the rusty grackle is a *chuck*, though he is told that at Hudson's Bay, at the breeding-time, they sing with a fine note.<sup>1</sup> Here they utter not only a *chuck*, but a *fine* shrill whistle. They cover the top of a tree now, and their concert is of this character: They all seem laboring together to get out a clear strain, as it were wetting their whistles

<sup>1</sup> [The only song they are known to possess is the whistle that Thoreau here describes.]

against their arrival at Hudson's Bay. They begin as it were by disgorging or spitting it out, like so much tow, from a full throat, and conclude with a clear, fine, shrill, ear-piercing whistle. Then away they go, all chattering together.

Hear a phoebe near the river. The golden willow is, methinks, a little livelier green and begins to peel a little, but I am not sure the bark is any smoother yet.

Heard a loud, long, dry, tremulous shriek which reminded me of a kingfisher, but which I found proceeded from a woodpecker which had just alighted on an elm; also its clear whistle or *chink* afterward. It is probably the hairy woodpecker, and I am not so certain I have seen it earlier this year. Wilson does not allow that the downy one makes exactly such a sound. Did I hear part of the note of a golden-crowned (?) wren this morning? It was undoubtedly a robin, the last part of his strain.

Some twenty minutes after sundown I hear the first *booming* of a snipe.

The forenoon was cloudy and in the afternoon it rained, but the sun set clear, lighting up the west with a yellow light, which there was no green grass to reflect, in which the frame of a new building is distinctly seen, while drops hang on every twig, and producing the first rainbow I have seen or heard of except one long ago in the morning. With April showers, methinks, come rainbows. Why are they so rare in the winter? Is the fact that the clouds are then of snow commonly, instead of rain, sufficient to account for it?

At sunset after the rain, the robins and song sparrows fill the air along the river with their song.

MacGillivray says that divers, mergansers, and cormorants actually fly under water, using their wings fully expanded. He had seen them pursuing sand eels along the shores of the Hebrides. Had seen the water-ouzel fly in like manner.

Several flocks of geese went over this morning also. Now, then, the main body are moving. Now first are they generally seen and heard.

*April 10.* Another fine clear morning with, as usual, a little frost.

6 A. M. — To river.

I see afar, more than one hundred rods distant, sailing on Hubbard's meadow, on the smooth water in the morning sun, conspicuous, two male sheldrakes and apparently one female. They glide along, a rod or two apart in shallow water, alternately passing one another and from time to time plunging their heads in the water, but the female (whom only the glass reveals) almost alone diving. I think I saw one male drive the other back. One male with the female kept nearly together, a rod or two ahead of the other.

Therien says James Baker sold his wood-lot south of Fair Haven Pond, about twenty-five acres, chiefly white pine, for one hundred and twenty dollars an acre, and that there was one hemlock whose top and branches alone yielded two and a half cords.<sup>1</sup>

The buds of the earliest gooseberry in garden now

<sup>1</sup> *Vide* next page.

first begin to show a little green on a close inspection.

P. M. — To Fair Haven Pond by boat.

A strong south wind and overcast. There is the slightest perceptible green on the hill now. No doubt in a rain it would be pretty obvious. Saw a tolerably fresh sucker floating. Have seen two halves two days before which looked very ancient, as if they had died in the winter. There are three or four small scallops in the dorsal fin. Another dead muskrat, equally old with the two others I have seen this spring, — as if they had died at the time of the great freshet in February.

At Lee's the early sedge: one only sheds pollen. The saxifrage there to-morrow; one flower is partly expanded.

I measured the hemlock mentioned on the last page [above]. The circumference at the butt, a foot from the ground, was  $9\frac{1}{2}$  feet, at ten feet from the ground  $8\frac{1}{2}$ , at the small end, where it was cut off,  $1\frac{1}{2}$  feet. Length, 40 feet. Its diameter diminished very regularly the first twenty-five feet.

As for the early sedge, who would think of looking for a flower of any kind in those dry tufts whose withered blades almost entirely conceal the springing green ones? I patiently examined one tuft after another, higher and higher up the rocky hill, till at last I found one little yellow spike low in the grass which shed its pollen on my finger. As for the saxifrage, when I had given it up for to-day, having, after a long search in the warmest clefts and recesses, found only three or four

buds which showed some white, I at length, on a still warmer shelf, found one flower partly expanded, and its common peduncle had shot up an inch. These few earliest flowers in these situations have the same sort of interest with the arctic flora, for they are remote and unobserved and often surrounded with snow, and most have not begun to think of flowers yet.

Early on the morning of the 8th I paddled up the Assabet looking for the first flowers of the white maple and alder. I held on to the low curving twigs of the maple where the stream ran swiftly, the round clusters of its bursting flower-buds spotting the sky above me, and on a close inspection found a few which (as I have said) must have blossomed the day before. I also paddled slowly along the riverside looking closely at the alder catkins and shaking the most loose, till at length I came to a bush which had been weighed down by the ice and whose stem curved downward, passing through the water, and on this was one looser and more yellowish catkin, which, as I have said, on a close examination showed some effete anthers near the peduncle.

The morning of the 6th, when I found the skunk-cabbage out, it was so cold I suffered from numbed fingers, having left my gloves behind. Since April came in, however, you have needed gloves only in the morning.

Under some high bare bank sloping to the south on the edge of a meadow, where many springs, issuing from the bank, melt the snow early, — there you find the first skunk-cabbage in bloom.

I see much yellow lily root afloat, which the muskrats have dug up and nibbled.

*April 11.* Rained in the night. Awake to see the ground white with snow, and it is still snowing, the sleet driving from the north at an angle of certainly not more than thirty or thirty-five degrees with the horizon, as I judge by its course across the window-panes. By mid-afternoon the rain has so far prevailed that the ground is bare. As usual, this brings the tree sparrows and *F. hyemalis* into the yard again.

*April 12.* Still falls a little snow and rain this morning, though the ground is not whitened. I hear a purple finch, nevertheless, on an elm, steadily warbling and uttering a sharp chirp from time to time.

P. M. — To Cliffs and Hubbard's Close.

Fair with drifting clouds, but cold and windy. At the spring brook I see some skunk-cabbage leaves already four or five inches high and partly unrolled. From the Cliff Hill the mountains are again thickly clad with snow, and, the wind being northwest, this coldness is accounted for. I hear it fell fourteen or fifteen inches deep in Vermont.

As I sit in a sheltered place on the Cliffs, I look over the pond with my glass, but see no living thing. Soon after, I saw a boat on Lee's meadow just inside the button-bushes on the west of the pond, about a mile distant, and, raising my glass, I saw one man paddling in the stern and another in white pantaloons standing up in the bow, ready to shoot. Presently I saw the

last raise his gun, take aim, and fire into the bushes, though I heard no sound from over the dashing waves, but merely saw the smoke as in a picture. There was a strong wind from the northwest, while I was looking southwest. The gunner then pointed out the course while his companion paddled and struck the game in the water with a paddle, and I distinctly saw him lift up a muskrat by the tail. In a few moments, very nearly the same actions were repeated, though this time I did not see the rat raised. Then, turning my glass down the stream, I saw, on the Miles meadow shore about half a mile distant, a man whom I knew emptying his boat of fat pine roots which he had got for spearing, while his dog was digging at a woodchuck's hole close by.

For a week past I have frequently seen the tracks of woodchucks in the sand.

Golden saxifrage out at Hubbard's Close, — one, at least, effete. It may have been the 10th.

The grass has within ten days shot up very perceptibly in shallow water and about springs. In the last place it forms dense moss-like tufts in some cases; also some warm southward banks are considerably greened, and some hollows where the ice has recently melted, but *generally* there is no *obvious* greening as yet. It is at most a mere radical greenness, which you must seek to find.

Cowslip will apparently open in two days at Hubbard's Close.<sup>1</sup>

<sup>1</sup> Not 16th, but apparently touched by frost, but probably some by Second Division. *Vide* 18th.

April 13. P. M. — To Second Division cowslips.

A fair day, but a cool wind still, from the snow-covered country in the northwest. It is, however, pleasant to sit in the sun in sheltered places.

The small croaking frogs are now *generally* heard in all those stagnant ponds or pools in woods floored with leaves, which are mainly dried up in the summer. At first, perhaps, you hear but one or two dry croaks, but, if you sit patiently, you may hear quite a concert of them at last, — *er-wah er-wah er-wah*, with a nasal twang and twist. — and see them dimpling the surface here and there by their movements. But if you approach the pond-side, they suddenly cease. We hear them at J. P. Brown's Pond, which is edged with ice still on the north. The water must be smooth and the weather pretty warm.

There is still some icy snow in hollows under the north sides of woods.

I see the feathers, apparently of a fox-colored sparrow, completely covering a stump, where some creature has devoured it. At a great ant-hill, the common half-red, half-black ants are stirring, apparently clearing out rubbish from their nest. Great quantities of odoriferous sweet-gale seed are collected with the scum at the outlet of Nut Meadow, for they float. The *Alnus incana* blossoms begin generally to show. The *serrulata* will undoubtedly blossom to-morrow in some places.<sup>1</sup>

The pine on the Marlborough road which I saw

<sup>1</sup> Or probably not till 15th? Did I not take the *incana* for this in '54?

from my window has been sawed down the past winter. I try to count its circles; count sixty-one from centre to sap, but there the pitch conceals the rest completely. I guessed there were fifteen more, at least. The tree was probably quite eighty years old. It was about two and a quarter feet in diameter.

The common hazel just out. It is perhaps the prettiest flower of the *shrubs* that have opened. A little bunch of (in this case) half a dozen catkins, one and three quarters inches long, trembling in the wind, shedding golden pollen on the hand, and, close by, as many minute, but clear crystalline crimson stars at the end of a bare and seemingly dead twig. For two or three days in my walks, I had given the hazel catkins a fillip with my finger under their chins to see if they were in bloom, but in vain; but here, on the warm south side of a wood, I find one bunch fully out and completely relaxed. They know when to trust themselves to the weather. At the same time I hear through the wood the sharp peep of the first hylodes I have chanced to hear. Many cowslip buds show a little yellow, but they will not open there for two or three days. The road is paved with solid ice there.

Returning by the steep side-hill just south of Holden's wood-lot and some dozen or fourteen rods west of the open land, I saw, amid the rattlesnake-plantain leaves, what I suspect to be the *Polygala paucifolia*, — some very beautiful oval leaves of a dull green (green turned dark) above, but beneath — and a great many showed the under side — a clear and brilliant purple (or lake ??), growing and looking like checkerberry leaves, but more

flaccid. It is three or four inches high, with the oval and revolute leaves at top and a few remote small bract-like leaves on the (three-sided) stem. This polygala is sometimes called flowering wintergreen, and, indeed, it is not only an evergreen but somewhat pyrola-like to the eye.

See a sparrow without marks on throat or breast, running peculiarly in the dry grass in the open field beyond, and hear its song, and then see its white feathers in tail; the baywing.

A small willow by the roadside beyond William Wheeler's, to-morrow.

*April 14.* 6 A. M. — To Island.

An overcast and moist day, but truly April — no sun all day — like such as began methinks on Fast-Day, or the 5th. You cannot foretell how it will turn out. The river has been steadily rising since the first of April, though you would not think there had been rain enough to cause it. It now covers the meadows pretty respectably. It is perhaps because the warm rain has been melting the frost in the ground. This may be the great cause of the regular spring rise. I see half a dozen crow blackbirds uttering their coarse rasping *char char*, like great rusty springs, on the top of an elm by the riverside; and often at each *char* they open their great tails. They also attain to a clear whistle with some effort, but seem to have some difficulty in their throats yet.

The *Populus tremuloides* by the Island shed pollen — a very few catkins — yesterday at least; for some

anthers are effete and black this morning, though it [*sic*] is hardly curved down yet an is but an inch and a half long at most. White maples are now generally in bloom. The musk tortoise stirring on the bottom. Most of the stellaria has been winter-killed, but I find a few flowers on a protected and still green sprig, probably not blossomed long.

At 8 A. M. — Took caterpillars' eggs from the apple trees at the Texas house and found about thirty.

It being completely overcast, having rained a little, the robins, etc., sing at 4.30 as at sundown usually. The waters, too, are smooth and full of reflections.

*April 15.* 9 A. M. — To Atkins's boat-house.

No sun till setting. Another still, moist, overcast day, without sun, but all day a crescent of light, as if breaking away in the north. The waters smooth and full of reflections. A still cloudy day like this is perhaps the best to be on the water. To the clouds, perhaps, we owe both the stillness and the reflections, for the light is in great measure reflected from the water. Robins sing now at 10 A. M. as in the morning, and the phœbe; and pigeon woodpecker's cackle is heard, and many martins (with white-bellied swallows) are skimming and twittering above the water, perhaps catching the small fuzzy gnats with which the air is filled. The sound of church bells, at various distances, in Concord and the neighboring towns, sounds very sweet to us on the water this still day. It is the song of the villages heard with the song of the birds.

The Great Meadows are covered, except a small island in their midst, but not a duck do we see there. On a low limb of a maple on the edge of the river, thirty rods from the present shore, we saw a fish hawk eating a fish. Sixty rods off we could [see] his white crest. We landed, and got nearer by stealing through the woods. His legs looked long as he stood up on the limb with his back to us, and his body looked black against the sky and by contrast with the white of his head. There was a dark stripe on the side of the head. He had got the fish under his feet on the limb, and would bow his head, snatch a mouthful, and then look hastily over his right shoulder in our direction, then snatch another mouthful and look over his left shoulder. At length he launched off and flapped heavily away. We found at the bottom of the water beneath where he sat numerous fragments of the fish he had been eating, parts of the fins, entrails, gills, etc., and some was dropped on the bough. From one fin which I examined, I judged that it was either a sucker or a pout. There were small leeches adhering to it.

In the meanwhile, as we were stealing through the woods, we heard the pleasing note of the pine warbler, bringing back warmer weather, and we heard one honk of a goose, and, looking up, saw a large narrow harrow of them steering northeast. Half a mile further we saw another fish hawk, upon a dead limb midway up a swamp white oak over the water, at the end of a small island. We paddled directly toward him till within thirty rods. A crow came scolding to the tree and lit within three feet, looking about as large, compared

with the hawk, as a crow blackbird to a crow, but he paid no attention to him. We had a very good view of him, as he sat sidewise to us, and of his eagle-shaped head and beak. The white feathers of his head, which were erected somewhat, made him look like a cople-crowned hen. When he launched off, he uttered a clear whistling note, — *phe phe, phe phe, phe phe*, — somewhat like that of a telltale, but more round and less shrill and rapid, and another, perhaps his mate, fifty rods off, joined him. They flew heavily, as we looked at them from behind, more like a blue heron and bittern than I was aware of, their long wings undulating slowly to the tip, like the heron's, and the bodies seeming sharp like a gull's and unlike a hawk's.

In the water beneath where he was perched, we found many fragments of a pout, — bits of red gills, entrails, fins, and some of the long flexible black feelers, — scattered for four or five feet. This pout appeared to have been quite fresh, and was probably caught alive. We afterward started one of them from an oak over the water a mile beyond, just above the boat-house, and he skimmed off very low over the water, several times striking it with a loud sound heard plainly sixty rods off at least; and we followed him with our eyes till we could only see faintly his undulating wings against the sky in the western horizon. You could probably tell if any were about by looking for fragments of fish under the trees on which they would perch.

We had scared up but few ducks — some apparently black, which quacked — and some small rolling-pins, probably teal.

Returning, we had a fine view of a blue heron, standing erect and open to view on a meadow island, by the great swamp south of the bridge, looking as broad as a boy on the side, and then some sheldrakes sailing in the smooth water beyond. These soon sailed behind points of meadow. The heron flew away, and one male sheldrake flew past us low over the water, reconnoitring, large and brilliant black and white. When the heron takes to flight, what a change in size and appearance! It is *presto change!* There go two great undulating wings pinned together, but the body and neck must have been left behind somewhere.

Before we rounded Ball's Hill, — the water now beautifully smooth, — at 2.30 P. M., we saw three gulls sailing on the glassy meadow at least half a mile off, by the oak peninsula, — the plainer because they were against the reflection of the hills. They looked larger than afterward close at hand, as if their whiteness was reflected and doubled. As we advanced into the Great Meadows, making the only ripples in their broad expanse, there being still not a ray of sunshine, only a subdued light through the thinner crescent in the north, the reflections of the maples, of Ponkawtasset and the poplar hill, and the whole township in the southwest, were as perfect as I ever saw. A wall which ran down to the water on the hillside, without any remarkable curve in it, was exaggerated by the reflection into the half of an ellipse. The meadow was expanded to a large lake, the shore-line being referred to the sides of the hills reflected in it. It was a scene worth many such voyages to see. It was remarkable

how much light those white gulls, and also a bleached post on a distant shore, absorbed and reflected through that sombre atmosphere, — conspicuous almost as candles in the night. When we got near to the gulls, they rose heavily and flapped away, answering a more distant one, with a remarkable, deliberate, melancholy, squeaking scream, mewing, or piping, almost a squeal. It was a *little* like the loon. Is this sound the origin of the name sea-mew? Notwithstanding the smoothness of the water, we could not easily see black ducks against the reflection of the woods, but heard them rise at a distance before we saw them. The birds were still in the middle of the day, but began to sing again by 4.30 P. M., probably because of the clouds. Saw and heard a kingfisher — do they not come with the smooth waters of April? — hurrying over the meadow as if on urgent business.

That general *tut tut tut tut*, or snoring, of frogs on the shallow meadow heard first slightly the 5th. There is a very faint *er er er* now and then mixed with it.

*April 16. 5 A. M. — To Hill.*

Clear and cool. A frost whitens the ground; yet a mist hangs over the village. There is a thin ice, reaching a foot from the water's edge, which the earliest rays will melt. I scare up several snipes feeding on the meadow's edge. It is remarkable how they conceal themselves when they alight on a bare spit of the meadow. I look with my glass to where one alighted four rods off, and at length detect its head rising amid the

cranberry vines and withered grass blades, — which last it closely resembles in color, — with its eye steadily fixed on me. The robins, etc., blackbirds, song sparrows sing now on all hands just before sunrise, perhaps quite as generally as at any season. Going up the hill, I examined the tree-tops for hawks. What is that little hawk about as big as a turtle dove on the top of one of the white oaks on top of the hill? It appears to have a reddish breast. Now it flies to the bare top of a dead tree. Now some crows join, and it pursues one, diving at it repeatedly from above, down a rod or more, as far as I can see toward the hemlocks. Returning that way, I came unexpectedly close to this hawk perched near the top of a large aspen by the river right over my head. He seemed neither to see nor hear me. At first I thought it a new woodpecker. I had a fair view of all its back and tail within forty feet with my glass. Its back was, I should say, a rather dark ash, spotted, and so barred, wings and back, with large white spots, woodpecker-like (not well described in books), probably on the inner vanes of the feathers, both secondaries and primaries, and probably coverts. The tail conspicuously barred with black, three times beyond the covering and feathers and once at least under them. Beneath and under tail, mainly a dirty white with long and conspicuous femoral feathers, unlike sparrow hawk. Head darker and bill dark. It was busily pruning itself, and suddenly pitched off downward. What I call a pigeon hawk.<sup>1</sup> In the meanwhile heard the quivet through the wood, and,

<sup>1</sup> Probably sharp-shinned. *Vide* May 4th.

looking, saw through an opening a small compact flock of pigeons flying low about.

From the Hill-top looked to the Great Meadows with glass. They were very smooth, with a slight mist over them, but I could see very clearly the pale salmon of the eastern horizon reflected there and contrasting with an intermediate streak of skim-milk blue, — now, just after sunrise.

#### P. M. — To Flint's Pond.

A perfectly clear and very warm day, a little warmer than the 31st of March or any yet, and I have not got far before, for the first time, I regret that I wore my greatcoat. Noticed the first wasp, and many cicindelæ on a sandy place. Have probably seen the latter before in the air, but this warmth brings them out in numbers. The gray of Hubbard's oaks looks drier and more like summer, and it is now drier walking, the frost in most places wholly out. I got so near a grass-bird as to see the narrow circle of white round the eye. The spots on the *Emys guttata*, in a still, warm leafy-paved ditch which dries up, are exceedingly bright now. Does it last? At Callitriche Pool (I see no flowers on it), I see what looks like minnows an inch long, with a remarkably forked tail-fin; probably larvæ of dragon-flies. The eyed head conspicuous, and something like a large dorsal fin. They dart about in this warm pool and rest at different angles with the horizon. The water ranunculus was very forward here. This pool dries up in summer. The very pools, the receptacles of all kinds of rubbish, now, soon after

the ice has melted, so transparent and of glassy smoothness and full of animal and vegetable life, are interesting and beautiful objects. Stow's cold pond-hole is still full of ice though partly submerged, — the only pool in this state that I see. The orange-copper vanessa, middle-sized, is out, and a great many of the large buff-edged are fluttering over the leaves in wood-paths this warm afternoon. I am obliged to carry my great-coat on my arm. A striped snake rustles down a dry open hillside where the withered grass is long.

I could not dig to the nest of the deer mouse in Britton's Hollow, because of the frost about six inches beneath the surface. (Yet, though I have seen no plowing in fields, the surveyors plowed in the road on the 14th.) As far as I dug, their galleries appeared at first to be lined with a sort of membrane, which I found was the bark or skin of roots of the right size, their galleries taking the place of the decayed wood. An oak stump.

At Flint's, sitting on the rock, we see a great many ducks, mostly sheldrakes, on the pond, which will hardly abide us within half a mile. With the glass I see by their reddish heads that all of one party — the main body — are females. You see little more than their heads at a distance and not much white but on their throats, perchance. When they fly, they look black and white, but not so large nor with that brilliant contrast of black and white which the male exhibits. In another direction is a male by himself, conspicuous, perhaps several. Anon alights near us a flock of golden-eyes — *surely*, with their great black (looking) heads and a white patch on the side; short

stumpy bills (after looking at the mergansers); much clear black, contrasting with much clear white. Their heads and bills look ludicrously short and parrot-like after the others. Our presence and a boat party on the pond at last drove nearly all the ducks into the deep easterly cove.

We stole down on them carefully through the woods, at last crawling on our bellies, with great patience, till at last we found ourselves within seven or eight rods — as I measured afterward — of the great body of them, and watched them for twenty or thirty minutes with the glass through a screen of cat-briar, alders, etc. There were twelve female sheldrakes close together, and, nearest us, within two rods of the shore, where it was very shallow, two or more constantly moving about within about the diameter of a rod and keeping watch while the rest were trying to sleep, — to catch a nap with their heads in their backs; but from time to time one would wake up enough to plume himself. It seemed as if they must have been broken of their sleep and were trying to make it up, having an arduous journey before them, for we had seen them all disturbed and on the wing within half an hour. They were headed various ways. Now and then they seemed to see or hear or smell us, and uttered a low note of alarm, something like the note of a tree-toad, but very faint, or perhaps a little more wiry and like that of pigeons, but the sleepers hardly lifted their heads for it. How fit that this note of alarm should be made to resemble the croaking of a frog and so not betray them to the gunners! They appeared to sink

about midway in the water, and their heads were all a rich reddish brown, their throats white. Now and then one of the watchmen would lift his head and turn his bill directly upward, showing his white throat.

There were some black or dusky ducks in company with them at first, apparently about as large as they, but more alarmed. Their throats looked straw-colored, somewhat like a bittern's, and I saw their shovel bills. These soon sailed further off.

At last we arose and rushed to the shore within three rods of them, and they rose up with a din, — twenty-six mergansers (I think all females), ten black ducks, — and five golden-eyes from a little further off, also another still more distant flock of one of these kinds. The black ducks alone uttered a sound, their usual hoarse *quack*. They all flew in loose array, but the three kinds in separate flocks. We were surprised to find ourselves looking on a company of birds devoted to slumber after the alarm and activity we had just witnessed.

Returning, at Goose Pond, which many water-bugs (*gyrinus*) were now dimpling, we scared up two black ducks. The shore was strewn with much fresh eel-grass and the fine, now short eriocaulon with its white roots, apparently all pulled up by them and drifted in.

The speaker's light to-night, and, after dark, the sound of geese honking all together very low over the houses and apparently about to settle on the Lee meadow.

Have not noticed fox-colored sparrows since April 13th.

I am startled sometimes these mornings to hear the sound of doves alighting on the roof just over my head; they come down so hard upon it, as if one had thrown a heavy stick on to it, and I wonder it does not injure their organizations. Their legs must be cushioned in their sockets to save them from the shock?

When we reached Britton's clearing on our return this afternoon, at sunset, the mountains, after this our warmest day as yet, had got a peculiar soft mantle of blue haze, pale blue as a blue heron, ushering in the long series of summer sunsets, and we were glad that we had stayed out so late and felt no need to go home now in a hurry.

*April 17. 5 A. M. — Up Assabet.*

Very little frost; a clear morning. The oars still cold to the hand at this hour. Did I not hear an *F. juncorum* at a distance??<sup>1</sup> Saw some crow blackbirds inspecting that old nest of theirs. I believe I see a tree sparrow still, but I do not remember an *F. hyemalis* for two days.<sup>2</sup> Geese went over at noon, when warm and sunny.

*P. M. — To Lee's Cliff.*

I leave off my greatcoat, though the wind rises rather fresh before I return. It is worth the while to walk so free and light, having got off both boots and greatcoat. Great flocks of grackles and red-wings about the Swamp Bridge Brook willows, perching restlessly on an apple tree all at once, and then, with a sweeping

<sup>1</sup> Yes.

<sup>2</sup> *Vide* 18th.

or curving flight, alighting on the ground. Many robins flit before me in flocks these days. I rarely find a nest (of the right species) near the river but it has a piece of a fish-line in it. The yellow-spot tortoises are very common now in the ditches, tumbling in and crawling off, and perhaps burying themselves at your approach. Many are outside. The second sallow catkin (or any willow) I have seen in blossom — there are three or four catkins on the twig partly open — I am about to clutch, but find already a bee curved close on each half-opened catkin, intoxicated with its early sweet, — one perhaps a honey-bee, — so intent on its sweets or pollen that they do not dream of flying. Various kinds of bees — some of the honey-bees — have little yellow masses of pollen (?) on their thighs; some seem to be taking [it] into their mouths. So quickly and surely does a bee find the earliest flower, as if he had slumbered all winter at the root of the plant. No matter what pains you take, probably — undoubtedly — an insect will have found the first flower before you.

Yesterday I saw several larger frogs out. Perhaps some were small bullfrogs. That warmth brought them out on to the bank, and they jumped in before me. The general stirring of frogs. To-day I see a *Rana palustris* — I think the first — and a middling-sized bullfrog, I think. I suspect that those first seen in Hubbard's Close were the little croakers.

I see by their droppings that many birds — perhaps robins — have lately roosted in that wine-glass apple scrub on Conantum, an excellent covert from the hawks,

and there are three old nests in it, though it is only six or eight feet in diameter. I also see where birds have roosted in a thick white pine in Lee's Wood. It is easy to detect their roosting-places now, because they are in flocks.

Saw a woodchuck. His deep reddish-brown rear, somewhat grizzled about, looked like a ripe fruit mellowed by winter. C. saw one some time ago. They have several holes under Lee's Cliff, where they have worn bare and smooth sandy paths under the eaves of the rock, and I suspect that they nibble the early leaves there. (The arabis is half exterminated by some creature.) They, or the partridges or rabbits, there and at Middle Conantum Cliff, make sad havoc with the earliest radical leaves and flowers which I am watching, and in the village I have to contend with the hens, who also love an early salad.

Sat at the wall corner to see an eagle's white head and tail against the red hillside, but in vain. The distant white pines over the Spanish Brook seem to flake into tiers; the whole tree looks like an open cone. A sudden warm day, like yesterday and this, takes off some birds and adds others. It is a crisis in their career. The fox-colored sparrows seem to be gone, and I suspect that *most* of the tree sparrows and *F. hyemalis*, at least, went yesterday. So the pleasanter weather seems not an unmixed benefit. The flowers of the common elm at Lee's are now loose and dangling, apparently well out a day or two in advance of Cheney's, but I see no pollen. Walking under the Cliff, I am struck by the already darker, healthier green of early

weeds there — *e. g.* the little thyme-flowering sandwort — before there is any green to speak of elsewhere.

Did I not see the yellow redpoll on an apple tree with some robins, by chance in the same place where I saw one last year?<sup>1</sup> Yet I see no chestnut on head, but bright-yellow breast and blackish further extremity.

The early aspen catkins are now some of them two and a half inches long and white, dangling in the breeze. The earliest gooseberry leaves are fairly unfolding now, and show some green at a little distance.

April 18. 6 A. M. — See and hear tree sparrows, and hear hyemalis still. Rained last evening and was very dark. Fair this morning and warm. White-bellied swallow's and martin's twitter now at 9 A. M.

P. M. — To Cliffs and Walden and Hubbard's Close.

The hillside and especially *low* bank-sides are now conspicuously green. Almost did without a fire this morning. Coming out, I find it very warm, warmer than yesterday or any day yet. It is a reminiscence of past summers. It is perfectly still and almost sultry, with wet-looking clouds hanging about, and from time to time hiding the sun. First weather of this kind. And as I sit on Fair Haven Hill-side, the sun actually burns my cheek; yet I left some fire in the house, not knowing behind a window how warm it was. The flooded meadows and river are smooth, and just enough in shadow for reflections. The rush sparrows tinkle now at 3 P. M. far over the bushes, and hylodes are

<sup>1</sup> Yes.

peeping in a distant pool. Robins are singing and peeping, and jays are screaming. I see one or two smokes in the horizon. I can still see the mountains slightly spotted with snow. The frost is out enough for plowing probably in most open ground.

When I reach the top of the hill, I see suddenly all the southern horizon (east or south from Bear Hill in Waltham to the river) full of a mist, like a dust, already concealing the Lincoln hills and producing distinct wreaths of vapor, the rest of the horizon being clear. Evidently a sea-turn, — a wind from over the sea, condensing the moisture in our warm atmosphere and putting another aspect on the face of things. All this I see and say long before I feel the change, while still sweltering on the rocks, for the heat was oppressive. Nature cannot abide this sudden heat, but calls for her fan. In ten minutes I hear a susurrus in the shrub oak leaves at a distance, and soon an agreeable fresh air washes these warm rocks, and some mist surrounds me.

A low blackberry on the rocks is now expanding its leaves just after the gooseberry. A little sallow, about two feet high and apparently intermediate between *tristis* and the next, with reddish anthers not yet burst, will bloom to-morrow in Well Meadow Path. The shad-bush flower-buds, beginning to expand, look like leaf-buds bursting now. Male sweet-gale. One cowslip fully expanded, but no pollen; probably is at Second Division.<sup>1</sup> Some are plowing. Am overtaken

<sup>1</sup> Some fully open May 4th, but no pollen till next morning in chamber!!

by a sudden sun-shower, after which a rainbow. Elm (American) in tumbler and probably at Cliffs probably a day [or] two before Cheney's.

In the evening hear far and wide the ring of toads, and a thunder-shower with its lightning is seen and heard in the west.

*April 19. 5 A. M. — Up Assabet.*

Warm and still and somewhat cloudy. Am without greatcoat. The guns are firing and bells ringing. I hear a faint *honk* and, looking up, see going over the river, within fifty rods, thirty-two geese in the form of a hay-hook, only two in the hook, and they are at least six feet apart. Probably the whole line is twelve rods long. At least three hundred have passed over Concord, or rather within the breadth of a mile, this spring (perhaps twice as many); for I have seen or heard of a dozen flocks, and the two I counted had about thirty each. Many tortoises have their heads out. The river has fallen a little. Going up the Assabet, two or three tortoises roll down the steep bank with a rustle. One tumbles on its edge and rolls swiftly like a disk cast by a boy, with its back to me, from eight or ten feet into the water. I hear no concert of tree sparrows. Hear the *tull-tull* of myrtle-bird<sup>1</sup> in street, and the jingle of the chip-bird.

This forenoon, sit with open window.

Now plowing and planting will begin generally.

P. M. — To Walden.

<sup>1</sup> White-throated sparrow.

Some golden willows will now just peel fairly, though on this one the buds have not started. (Another sudden change in the wind to northeast and a freshness with some mist from the sea at 3.30 P. M.) These osiers to my eye have only a little more liquid green than a month ago. A shad frog on the dry grass. The wild red cherry will begin to leaf to-morrow.

From Heywood's Peak I thought I saw the head of a loon in the pond, thirty-five or forty rods distant. Bringing my glass to bear, it seemed sunk very low in the water, — all the neck concealed, — but I could not tell which end was the bill. At length I discovered that it was the whole body of a little duck, asleep with its head in its back, exactly in the middle of the pond. It had a moderate-sized black head and neck, a white breast, and *seemed* dark-brown above, with a white spot on the side of the head, not reaching to the outside, from base of mandibles, and another, perhaps, on the end of the wing, with some black there. It sat drifting round a little, but with ever its breast toward the wind, and from time to time it raised its head and looked round to see if it were safe. I think it was the smallest duck I ever saw. Floating buoyantly asleep on the middle of Walden Pond. Was it not a female of the buffle-headed or spirit duck? I believed the wings looked blacker when it flew, with some white beneath. It floated like a little casket, and at first I doubted a good while if it possessed life, until I saw it raise its head and look around. It had chosen a place for its nap exactly equidistant between the two shores there, and, with its breast to the wind, swung

round only as much as a vessel held by its anchors in the stream. At length the cars scared it

Goodwin had caught twenty-five pouts and one shiner at the Walden meadow, but no perch.

Slippery elm in tumbler to-day: probably to-morrow at Cliffs.

A partridge drums.

*April 20.* Rains all day, taking out the frost and imprisoning me. You cannot set a post yet on account of frost.

*April 21.* 5 A. M. — To Cliffs.

Fair and still. There is a fog over the river, which shows at a distance more than near by. Not much. The frost conceals the green of the gooseberry leaves just expanding. The shallow puddles left by yesterday's rain in the fields are skimmed over.

Hear the first seringo. The duskyish crown is divided by a lighter line. Above it is ashy-brown and drab (?), a streak of lemon yellow over the eye; some brownish drab or bay making a spot on wings; white lines diverging from throat; reddish legs against sun; breast and sides dashed. It has not the note of Nuttall's Savannah, nor, methinks, the blackness of Wilson's. Is it the *passerina*, which Nuttall does not describe? <sup>1</sup>

<sup>1</sup> Yes. He calls it *F. saranarum* (p. 494); says they arrive about the middle of May "occasionally." "On these occasions they perch in sheltered trees in pairs, and sing in an agreeable voice somewhat like that of the Purple Finch, though less vigorously." Thinks they go

At Cliffs, I hear at a distance a wood thrush.<sup>1</sup> It affects us as a part of our unfallen selves. The *Populus grandidentata* there may open to-morrow. The frost saves my feet a wetting probably. As I sit on the Cliffs, the sound of the frost and frozen drops melting and falling on the leaves in the woods below sounds [*sic*] like a gentle but steady rain all the country over, while the sun shines clear above all.

Aunt Maria has put into my hands to-day for safe-keeping three letters from Peter Thoreau, dated Jersey (the first July 1st, 1801, the second April 22d, 1804, and the third April 11th, 1806) and directed to his niece "Miss Elizabeth Thoreau, Concord, Near Boston," etc.; also a "Vue de la Ville de St. Helier," etc., accompanying the first. She is not certain that any more were received from him.

The first is in answer to one from Elizabeth announcing the death of her father (my grandfather). He states that *his* mother died the 26th of June, 1801, — the day before he received E.'s letter, — though not till after he had heard from another source of the death of his brother, which was not communicated to his mother. "She was in the 79th year of her age, and retained her memory to the last. . . . She lived with my two sisters, who took the greatest care of her." He says that he had written to E.'s father about his oldest brother, who died about a year before, but had

north to breed. [It would be hard to describe the grasshopper sparrow's song more inaccurately.]

<sup>1</sup> [The singer must have been a hermit thrush. The date is conclusive.]

had no answer; had written that he left his children, two sons and a daughter, in a good way. "The eldest son and daughter are both married, and have children, the youngest is about eighteen. I am still a widower of four children. . . . I have but two left, Betsy and Peter, James and Nancy are both at rest." He adds that he sends a view "of our native town," etc.

The second of these letters is sent by Captain John Harvey of Boston, then at Guernsey. He says that on the 4th of February previous he sent her a copy<sup>1</sup> of the last letter he had written, which was in answer to her second, since he feared she had not received it. Says they are still at war with the French; that they received the day before a letter from her "Uncle and Aunt Le Cappelain of London." Complains of not receiving letters. "Your Aunts Betsy and Peter join with me," etc.

According to the third letter, he received an answer to that he sent by Captain Harvey, by Captain Touzel, and will forward this by the last, who is going *via* Newfoundland to Boston. "He expects to go to Boston every year." Several vessels from Jersey go there every year. His nephew had told him some time before that he "met a gentleman from Boston who told him he [saw or knew? (torn out)]<sup>2</sup> Thoreau & Hayse there," and he (Peter Thoreau) therefore thinks the children must have kept up the name of the firm. Says Captain Harvey was an old friend of his. "Your cousin John is a Lieutenant in the British service, he has been already a campaign on the continent, he

<sup>1</sup> Where is it?

<sup>2</sup> [The brackets are Thoreau's.]

is very fond of it." "Your aunts Betsy and Peter join," etc.

Aunt Maria thinks the correspondence ceased at Peter's death, because he was the one who wrote English.<sup>1</sup>

P. M. — Sail to meadow near Carlisle Bridge.

A fine, clear, and pleasant day with a little west wind. Saw a painted turtle not two inches in diameter. This must be more than one year old. A female red-wing. I see yellow redpolls on the bushes near the water, — handsome birds, — but hear no note. Watched for some time a dozen black ducks on the meadow's edge in a retired place, some on land and some sailing. Fifty rods off and without the glass, they looked like crows feeding on the meadow's edge, with a scarcely perceptible tinge of brown. Examining the ground afterward, found that the whitish lichen thallus (which formed a crust, a sort of scurfy bald place, here and there in the meadow where the water had just risen) was loosened up and floating over the bare spaces mixed with a few downy feathers. I thought the flat meadow islets showed traces of having been probed by them. *All* the button-bushes, etc., etc., in and about the water are now swarming with those minute fuzzy gnats about an eighth of an inch long. The insect youth are on the wing. The whole shore resounds with their hum wherever we approach it, and they cover our boat and persons. They are in countless myriads the whole length of the river. A peep, peetweet,

<sup>1</sup> [Sanborn, pp. 2-4.]

on the shore. There is some gossamer on the willows. The river has risen considerably, owing to yesterday's rain, and new drift is brought down. The greater fullness of the Assabet is perceptible at the junction.

The New York *Tribune* said on the 19th, "The caterpillar-blossoms, and the slightest peeping of green leaves among the poplars and willows, and a tolerable springing of grass, are the only vegetable proofs yet to be seen." I should think they were just with our gooseberry.

*April 22. 5.30 A. M.* — To Assabet stone bridge.

Tree sparrows still. See a song sparrow getting its breakfast in the water on the meadow like a wader. Red maple yesterday, — an early one by further stone bridge. Balm-of-Gilead probably to-morrow. The black currant is just begun to expand leaf — probably yesterday elsewhere — a little earlier than the red. Though my hands are cold this morning I have not worn gloves for a few *mornings* past, — a week or ten days. The grass is now become rapidly green by the sides of the road, promising dandelions and buttercups.

P. M. — To Lee's Cliff.

Fair, but windy. Tree sparrows about with their buntingish head and faint chirp. The leaves of the skunk-cabbage, unfolding in the meadows, make more show than any green yet. The yellow willow catkins pushing out begin to give the trees a misty, downy appearance, dimming them. The bluish band

on the breast of the kingfisher leaves the pure white beneath in the form of a heart. The blossoms of the sweet-gale are now on fire over the brooks, contorted like caterpillars. The female flowers also out like the hazel, with more stigmas, — out at same time with the male. I first noticed my little mud turtles in the cellar out of their [*sic*], one of them, some eight days ago. I suspect those in the river begin to stir about that time? *Antennaria* probably yesterday, Skull-cap Meadow Ditch. Many yellow redpolls on the willows now. They jerk their tails constantly like phœbes, but I hear only a faint chip. Could that have been a female with them, with an ash head and merely a yellow spot on each side of body, white beneath (?), and forked tail?<sup>1</sup> Red-stemmed moss now. Goosanders, male and female. They rise and fly, the female leading. They afterward show that they can get out of sight about as well by diving as by flying. At a distance you see only the male, alternately diving and sailing, when the female may be all the while by his side. Getting over the wall under the middle Conantum Cliff, I heard a loud and piercingly sharp whistle of two notes, — *phē-phē*, like a peep somewhat. Could it have been a woodchuck? Heard afterward under Lee's Cliff a similar fainter one, which at one time *appeared* to come from a pigeon woodpecker. Cowbirds on an apple tree. Crowfoot on Cliff. Johnswort radical leaves have grown several inches and angelica shows.

Elder leaves have grown one and a half inches, and thimble-berry is forward under rocks. Meadow-

<sup>1</sup> Probably a myrtle-bird.

sweet in some places begins to open to-day; also barberry under Cliffs and a moss rose to-morrow. Say earliest gooseberry, then elder, raspberry, thimbleberry, and low blackberry (the last two under rocks), then wild red cherry, then black currant (yesterday), then meadow-sweet, and barberry under Cliff, to-day. A moss rose to-morrow and hazel under Cliffs to-morrow.

*April 23.* River higher than before since winter. Whole of Lee Meadow covered. Saw two pigeon woodpeckers approach and, I think, put their bills together and utter that *o-week, o-week*. The currant and second gooseberry are bursting into leaf.

P. M. — To Cedar Swamp *via* Assabet.

Warm and pretty still. Even the riversides are quiet at this hour (3 P. M.) as in summer; the birds are neither seen nor heard. The anthers of the larch are conspicuous, but I see no pollen. White cedar to-morrow.<sup>1</sup> See a frog hawk beating the bushes regularly. What a peculiarly formed wing! It should be called the kite. Its wings are very narrow and pointed, and its form in front is a remarkable curve, and its body is not heavy and buzzard-like. It occasionally hovers over some parts of the meadow or hedge and circles back over it, only rising enough from time to time to clear the trees and fences. Soon after I see hovering over Sam Barrett's, high sailing, a more buzzard-like brown hawk, black-barred beneath and on tail, with short, broad, ragged wings and perhaps a

<sup>1</sup> In house the 24th.

white mark on under side of wings. The chickens utter a note of alarm. Is it the broad-winged hawk (*Falco Pennsylvanicus*)? <sup>1</sup> But why should the other be called *F. fuscus*? I think this is called the partridge hawk. The books are very unsatisfactory on these two hawks. Apparently barn swallows over the river. And do I see bank swallows also?

C. says he has seen a yellow-legs.

I have seen also for some weeks occasionally a brown hawk with white rump, flying low, which I have thought the frog hawk in a different stage of plumage; but can it be at this season? and is it not the marsh hawk? Yet it is not so heavy nearly as the hen-hawk.<sup>2</sup>

*April 24.* P. M. — To Flint's Pond.

Warm and quite a thick haze. Cannot see distant hills, nor use my glass to advantage. The *Equisetum arvense* on the causeway sheds its green pollen, which looks like lint on the hand abundantly, and may have done so when I *first* saw it upon the 21st. Young caterpillars' nests are just hatched on the wild cherry. Some are an inch in diameter, others just come out. The little creatures have crawled at once to the extremity of the twigs and commenced at once on the green buds just about to burst, eating holes into them. They do not come forth till the buds are about to burst. I see on the pitch pines at Thrush Alley that golden-crested wren or the other, ashy-olive above and whitish beneath, with a white bar on wings, restlessly darting

<sup>1</sup> Probably not. *Vide* May 2d.

<sup>2</sup> Probably female hen-harrier [*i. e.* marsh hawk].

at insects like a flycatcher, — into the air after them. It is quite tame. A very neat bird, but does not sing now. I see a bee like a small bumble-bee go into a little hole under a leaf in the road, which apparently it has made, and come out again back foremost. That fine slaty-blue butterfly, bigger than the small red, in wood-paths. I see a cone-bearing willow in dry woods, which will begin to leaf to-morrow, and apparently to show cones. *Pyrus arbutifolia* will begin to leaf to-morrow. Its buds are red while those of the shad-bush are green. I can find no red cedar in bloom, but it will undoubtedly shed pollen to-morrow. It is on the point of it. I am not sure that the white cedar is any earlier. The sprigs of red cedar, now full of the buff-colored staminate flowers, like fruit, are very rich. The next day they shed an abundance of pollen in the house. It is a clear buff color, while that of the white cedar is very different, being a faint salmon. It would be very pleasant to make a collection of these powders, — like dry ground paints. They would be the right kind of chemicals to have. I see the black birch stumps, where they have cut by Flint's Pond the past winter, completely covered with a greasy-looking pinkish-colored cream, yet without any particular taste or smell, — what the sap has turned to. The *Salix alba* begins to leaf. Have not seen the *F. hyemalis* for a week.

April 25. A moist April morning. A small native willow leafing<sup>1</sup> and showing catkins to-day; also the

<sup>1</sup> Or say May 1st, if they are bracts.

black cherry in some places. The common wild rose to-morrow. Balm-of-Gilead will not shed pollen apparently for a day or more. Shepherd's-purse will bloom to-day, — the first I have noticed which has sprung from the ground this season, or of an age. Say lilac begins to leaf with common currant.

P. M. — To Beck Stow's.

Hear a faint cheep and at length detect the white-throated sparrow, the handsome and well-marked bird, the largest of the sparrows, with a yellow spot on each side of the front, hopping along under the rubbish left by the woodchopper. I afterward hear a faint *cheep* very rapidly repeated, making a faint sharp jingle, — no doubt by the same.<sup>1</sup> Many sparrows have a similar faint metallic *cheep*, — the tree sparrow and field sparrow, for instance. I first saw the white-throated sparrow at this date last year. Hear the peculiar *squeaking* notes of a pigeon woodpecker. Two black ducks circle around me three or four times, wishing to alight in the swamp, but finally go to the river meadows. I hear the whistling of their wings. Their bills point downward in flying.

The *Andromeda calyculata* is out in water, in the little swamp east of Beck Stow's, some perhaps yesterday; and C. says he saw many bluets yesterday, and also that he saw two *F. hyemalis* yesterday.

I have noticed three or four upper jaws of muskrats on the meadow lately, which, added to the dead bodies floating, make more than half a dozen perhaps drowned out last winter.

<sup>1</sup> Probably by field sparrows; this their common low note.

After sunset paddled up to the Hubbard Bath. The bushes ringing with the evening song of song sparrows and robins, and the evening sky reflected from the surface of the rippled water like the *lake* grass on pools. A spearers' fire seems three times as far off as it is.

*April 26.* A cloudy, still, damp, and at length drizzling day.

P. M. — To Bayberry and Black Ash Cellar.

Wheildon's arbor-vitæ well out, maybe for a week. The silvery abele, probably to-day or yesterday, but I do not see pollen. The blossoms of the red maple (some a yellowish green) are now most generally conspicuous and handsome scarlet crescents over the swamps. Going over Ponkawtasset, hear a golden-crested (?) wren, — the robin's note, etc., — in the tops of the high wood; see myrtle-birds and half a dozen pigeons. The *prate* of the last is much like the creaking of a tree. They lift their wings at the same moment as they sit. There are said to be many about now. See their warm-colored breasts. I see pigeon woodpeckers billing on an oak at a distance. Young apple leafing, say with the common rose, also some early large ones. Bayberry not started much. Fever-bush out apparently a day or two, between Black Birch Cellar and Easterbrook's. It shows plainly now, before the leaves have come out on bushes, twenty rods off. See and hear chewinks, — all their strains; the same date with last year, by accident. Many male and female white-throated sparrows feeding on the pasture with the song sparrow. The

male's white is buff in the female. A brown thrasher (?) seen at a little distance.<sup>1</sup>

We see and hear more birds than usual this mizzling and still day, and the robin sings with more vigor and promise than later in the season.

*April 27.* 5 A. M. — S. tristis Path around Cliffs.

Cold and windy, but fair. The earliest willow by railroad begins to leaf and is out of bloom. Few birds are heard this cold and windy morning. Hear a partridge drum before 6 A. M., also a golden-crested (?) wren. *Salix tristis*, probably to-day, the female more forward than the male. Heard a singular sort of screech, somewhat like a hawk, under the Cliff, and soon some pigeons flew out of a pine near me. The black and white creepers running over the trunks or main limbs of red maples and uttering their fainter oven-bird-like notes. The principal singer on this walk, both in wood and field away from town, is the field sparrow. I hear the sweet warble of a tree sparrow in the yard.

Cultivated cherry is beginning to leaf. The balm-of-Gilead catkins are well loosened and about three inches long, but I have seen only fertile ones. Say male the 25th, 26th, or 27th.

*April 28.* A second cold but fair day. Good fires are required to-day and yesterday.

P. M. — Sail to Ball's Hill.

The *chimney swallow*, with the white-bellied and barn swallows, over the river. The red maples, now

<sup>1</sup> Heard May 4th.

in bloom, are quite handsome at a distance over the flooded meadow beyond Peter's. The abundant wholesome gray of the trunks and stems beneath surmounted by the red or scarlet crescents. Are not they sheldrakes which I see at a distance on an islet in the meadow? The wind is strong from the northwest.

Landed at Ball's Hill to look for birds under the shelter of the hill in the sun. There were a great many myrtle-birds there, — they have been quite common for a week, — also yellow redpolls, and some song sparrows, tree sparrows, field sparrows, and one *F. hyemalis*. In a cold and windy day like this you can find more birds than in a serene one, because they are collected under the wooded hillsides in the sun. The myrtle-birds flitted before us in great numbers, yet quite tame, uttering commonly only a *chip*, but sometimes a short trill or *che che, che che, che che*. Do I hear the *tull-lull* in the afternoon? It is a bird of many colors, — slate, yellow, black, and white, — singularly spotted. Those little gnats of the 21st are still in the air in the sun under this hill, but elsewhere the cold strong wind has either drowned them or chilled them to death. I saw where they had taken refuge in a boat and covered its bottom with large black patches.

I noticed on the 26th (and also to-day) that since this last rise of the river, which reached its height the 23d, a great deal of the young flag, already six inches to a foot long, though I have hardly observed it growing yet, has washed up all along the shore, and as to-day I find a piece of flag-root with it gnawed by a muskrat, I think that they have been feeding very exten-

sively on the white and tender part of the young blades. They, and not ducks, for it is about the bridges also as much as anywhere. I think that they desert the clams now for this vegetable food. In one place a dead muskrat scents the shore, probably another of those drowned out in the winter. Saw the little heaps of dirt where worms had come out by river.

*April 29.* This morning it snows, but the ground is not yet whitened. This will probably take the cold out of the air. Many chip-birds are feeding in the yard, and one bay-wing. The latter incessantly scratches like a hen, all the while looking about for foes. The bay on its wings is not obvious except when it opens them. The white circle about the eye is visible afar. Now it makes a business of pluming itself, doubling prettily upon itself, now touching the root of its tail, now thrusting its head under its wing, now between its wing and back above, and now between its legs and its belly; and now it drops flat on its breast and belly and spreads and shakes its wings, now stands up and repeatedly shakes its wings. It is either cleaning itself of dirt acquired in scratching and feeding, — for its feet are black with mud, — or it is oiling its feathers thus. It is rather better concealed by its color than the chip-bird with its chestnut crown and light breast. The chip-bird scratches but slightly and rarely; it finds what it wants on the surface, keeps its head down more steadily, not looking about. I see the bay-wing eat some worms.

For two or three days the *Salix alba*, with its catkins

(not yet open) and its young leaves, or bracts (?), has made quite a show, before any other *tree*, — a pyramid of tender yellowish green in the russet landscape.

The water now rapidly going down on the meadows, a bright-green grass is springing up.

P. M. — By boat to Lupine Hill.

It did not whiten the ground. Raw, overcast, and threatening rain. A few of the cones within reach on F. Monroe's larches shed pollen: say, then, yesterday. The crimson female flowers are now handsome but small.

That lake grass — or perhaps I should call it *purple* grass — is now apparently in perfection on the water. Long and slender blades (about an eighth of an inch wide and six to twelve inches long, the part exposed) lie close side by side straight and parallel on the surface, with a dimple at the point where they emerge. Some are a very rich purple, with apparently a bloom, and very suggestive of placidity. It is a true *bloom*, at any rate, — the first blush of the spring caught on these little standards elevated to the light. By the water they are left perfectly smooth and flat and straight, as well as parallel, and thus, by their mass, make the greater impression on the eye. It has a strong marshy, somewhat fishy, almost seaweed-like scent when plucked. Seen through a glass the surface is finely grooved.

The scrolls of the interrupted fern are already four or five inches high.

I see a woodchuck on the side of Lupine Hill, eight or ten rods off. He runs to within three feet of his hole; then stops, with his head up. His whole body makes

an angle of forty-five degrees as I look sideways at it. I see his shining black eyes and black snout and his little erect ears. He is of a light brown forward at this distance (hoary above, yellowish or sorrel beneath), gradually darkening backward to the end of the tail, which is dark-brown. The general aspect is grizzly, the ends of most of the hairs being white. The yellowish brown, or rather sorrel, of his throat and breast very like the sand of his burrow, over which it is slanted.<sup>1</sup> No glaring distinctions to catch the eye and betray him. As I advance, he crawls a foot nearer his hole, as if to make sure his retreat while he satisfies his curiosity. Tired of holding up his head, he lowers it at last, yet waits my further advance.

The snout of the little sternotherus is the most like a little black stick seen above the water of any of the smaller tortoises. I was almost perfectly deceived by it close at hand; but it moved.

Choke-cherry begins to leaf. Dandelions out yesterday, at least. Some young alders begin to leaf. *Viola ovata* will open to-morrow. Mountain-ash began to leaf, say yesterday. Makes a show with leaves alone before any tree.

Paddling slowly along, I see five or six snipes within four or five rods, feeding on the meadow just laid bare, or in the shallow and grassy water. This dark, damp, cold day they do not mind me. View them with my glass. How the ends of their wings curve upward!  They do not thrust their bills clear down com-

<sup>1</sup> Four nails on fore feet and five behind. The hind feet are also longer. Are the first not hands partly?

monly, but wade and nibble at something amid the grass, apparently on the surface of the water. Sometimes it seems to be the grass itself, sometimes on the surface of the bare meadow. They are not now thrusting their bills deep in the mud. They have dark-ash or slate-colored breasts. At length they take a little alarm and rise with a sort of rippling whistle or peep, a little like a robin's peep, but faint and soft, and then alight within a dozen rods. I hear often at night a very different harsh squeak from them, and another squeak much like the nighthawk's, and also the booming.

*April 30.* Horse-chestnut begins to leaf, — one of them.

Another, more still, cloudy, almost drizzling day, in which, as the last three, I wear a greatcoat.

P. M. — To Lee's Cliff.

Privet begins to leaf. (*Viburnum nudum* and *Lentago* yesterday.)

I observed yesterday that the barn swallows confined themselves to one place, about fifteen rods in diameter, in Willow Bay, about the sharp rock. They kept circling about and flying up the stream (the wind easterly), about six inches above the water, — it was cloudy and almost raining, — yet I could not perceive any insects there. Those myriads of little fuzzy gnats mentioned on the 21st and 28th must afford an abundance of food to insectivorous birds. Many new birds should have arrived about the 21st. There were plenty of myrtle-birds and yellow redpolls where the gnats

were. The swallows were confined to this space when I passed up, and were still there when I returned, an hour and a half later. I saw them nowhere else. They uttered only a slight twitter from time to time and when they turned out for each other on meeting. Getting their meal seemed to be made a social affair. Pray, how long will they continue to circle thus without resting?

The early willow by Hubbard's Bridge has not begun to leaf. This would make it a different species from that by railroad, which has.

Hear a short, rasping note, somewhat tweezer-bird-like, I think from a yellow redpoll. Yellow dor-bug.

I hear from far the scream of a hawk circling over the Holden woods and swamp. This accounts for those two men with guns just entering it. What a dry, shrill, angry scream! I see the bird with my glass resting upon the topmost plume of a tall white pine. Its back, reflecting the light, looks white in patches; and now it circles again. It is a red-tailed hawk. The tips of its wings are curved upward as it sails. How it scolds at the men beneath! I see its open bill. It must have a nest there. Hark! there goes a gun, and down it tumbles from a rod or two above the wood. So I thought, but was mistaken. In the meanwhile, I learn that there is a nest there, and the gunners killed one this morning, which I examined. They are now getting the young. Above it was brown, but not at all reddish-brown except about head. Above perhaps I should call it brown, and a dirty white beneath; wings above

thickly barred with darker, and also wings beneath. The tail of twelve reddish feathers, once black-barrred near the end. The feet pale-yellow and very stout, with strong, sharp black claws. The head and neck were remarkably stout, and the beak short and curved from the base. Powerful neck and legs. The claws pricked me as I handled it. It measured one yard and three eighths plus from tip to tip, *i. e.* four feet and two inches.<sup>1</sup> Some ferruginous on the neck; ends of wings nearly black.

Columbine just out; one anther sheds. Also turritis will to-morrow apparently; many probably, if they had not been eaten. Crowfoot and saxifrage are now in prime at Lee's; they yellow and whiten the ground. I see a great many little piles of dirt made by the worms on Conantum pastures.

The woodchuck has not so much what I should call a musky scent, but exactly that peculiar rank scent which I perceive in a menagerie. The musky at length becomes the regular wild-beast scent.

Red-wing blackbirds now fly in large flocks, covering the tops of trees — willows, maples, apples, or oaks — like a black fruit, and keep up an incessant gurgling and whistling, — all for some purpose; what is it? White pines now show the effects of last year's drought in our yard and on the Cliffs, the needles faded and turning red to an alarming extent. I now see many *Juniperus repens* berries of a handsome light blue above, being still green beneath, with three hoary pouting lips. The Garfields had found a burrow of

<sup>1</sup> *Vide* forward. *More.*

young foxes. How old? <sup>1</sup> I see the black feathers of a blackbird by the Miles Swamp side, and this single bright-scarlet one shows that it belonged to a red-wing, which some hawk or quadruped devoured.

<sup>1</sup> Saw the old and tracks of young; thinks they may be one month old.