

## VI

APRIL. 1856

(ET. 38)

*April 1.* P. M.—Down railroad, measuring snow, and to Fair Haven Hill.

West of railroad	East of railroad	Average	Trillium Wood
2	3	0	5½ inches
0	3	0	11
3	9	0	11
5	7	0	7
4	11	0	8
4	13	10	12
4	13	8	11
5	12	0	11
3	13	0	11
5	14	0	6
5	13	0	9
7	15	0	14
8	16	0	11
14	13	0	10
9	12	0	10
7	17	0	11
3	11	0	8
10	11	0	8
5	15	3	6
5	15	9	3
40)344(8½	6	20)200(10 inches	
	0		
	1		
	20		
24)57(2½			

It appears from the above how rapidly the snow has melted on the east side of the railroad causeway, though eight to twelve rods from it, being sheltered by it from the northwest wind.<sup>1</sup> It is for the most part bare ground there. Adhering to these localities, the average depth in open land is five and one half inches, but the east side of railroad is a peculiarly sheltered place and hence bare, while the earth generally is covered. It is probably about seven inches deep on a level generally in open land. It has melted at about the same rate west of railroad and in Trillium Woods since the 19th. It is a question whether it is better sleighing or wheeling now, taking all our roads together. At any rate we may say the sleighing lasted till April. In some places it still fills the roads level with the walls, and bears me up still in the middle of the day. It grows more and more solid, apparently freezing at night quite through. William Wheeler (of the Corner road) tells me that it was more solid this morning than any time in the winter, and he was surprised to find that it would bear his oxen where three or four feet deep behind his house. On some roads you walk in a path recently shovelled out, with upright walls of snow three or four feet high on each side and a foot of snow beneath you, for twenty or thirty rods; and this is old snow. We have had none since March 20th, and that was very moist and soon melted. The drifts on the east side of the depot, which have lain there a great part of the winter, still reach up to the top of the first pane of glass. But, generally speaking, we slump so much, especially

<sup>1</sup> Vide Apr. 11.

in the woods, except in the morning, and the snow is so deep, that we are confined to the roads or the river still. Choppers cannot work in the woods yet, and teams cannot get in for wood yet.

A new snow of this depth would soon go off, but this old snow is solid and icy and wastes very slowly. It seems to be gradually turning to ice. I observe that, while the snow has melted unevenly in waves and ridges, there is a transparent icy glaze about one sixteenth of an inch thick but as full of holes as a riddle, spread like gauze level over all, resting on the prominent parts of the snow, leaving hollows beneath from one inch to six or more inches in depth. I often see the spiders running underneath this. This is the surface, which has melted and formed an icy crust, and, being transparent, it has transmitted the heat to the snow beneath and has outlasted that. This crashes and rattles under your feet.

The bare places now are the steep south and west, or southwest, sides of hills and cliffs, and also next to woods and houses on the same sides, the bridges and brows of hills and slighter ridges and prominences in the fields, low open ground protected from the northwest wind, under trees, etc. I might have put the roads second.

Going by the path to the Springs, I find great beds of oak leaves, sometimes a foot thick, very dry and crisp and filling the path, or one side of it, in the woods for a quarter of a mile, inviting one to lie down. They have absorbed the heat and settled, like the single one seen yesterday, in mass a foot or more, making a path to

that depth. Yet when they are unusually thick they preserve the snow beneath and are found to cover an almost icy mound.

*April 2. 8 A. M.—To Lee's Cliff via railroad, Andromeda Ponds, and Well Meadow.*

I go early, while the crust is hard. I hear a few song sparrows tinkle on the alders by the railroad. They skulk and flit along below the level of the ground in the ice-filled ditches; and bluebirds warble over the Deep Cut. A foot or more of snow in Andromeda Ponds.

In the warm recess at the head of Well Meadow, which makes up on the northeast side of Fair Haven, I find many evidences of spring. Pushed up through the dead leaves, yet flattened by the snow and ice which has just melted here, behold! the skunk-cabbage has been in bloom, *i. e.* has shed pollen some time and been frost-bitten and decayed. All that now sheds pollen here has been frost-bitten. Others are ready to shed it in a day or two. I find no other flower nearly so forward as this. The cowslip appears to be coming next to it. Its buds are quite yellowish and half an inch, almost, in diameter. The alder scales do not even appear relaxed yet. This year, at least, the cabbage is the first flower; and perhaps it is always earlier than I have thought, if you seek it in a favorable place.<sup>1</sup> The springy soil in which it grows melts the snows early, and if, beside, it is under the south side of a hill in an open oozy alder swamp in a recess sheltered from cold winds like this, it *may commonly* be the first flower.<sup>2</sup>

<sup>1</sup> It *may* possibly be a little. *Vide* the 4th inst.

<sup>2</sup> Doubtful.

It will take you half a lifetime to find out where to look for the earliest flower. I have hitherto found my earliest at Clamshell, a much more exposed place.<sup>1</sup> Look for some narrow meadowy bay, running north into a hill and protected by the hill on the north and partly on the east and west. At the head of this meadow, where many springs ooze out from under the hill and saturate all the ground, dissolving the snow early in the spring, in the midst, or on the edge, of a narrow open alder swamp, there look for the earliest skunk-cabbage and cowslip, where some little black rills are seen to meander or heard to tinkle in the middle of the coldest winter. There appear the great spear-heads of the skunk-cabbage, yellow and red or uniform mahogany-color, ample hoods sheltering their purple spadixes. The plaited buds of the hellebore are four or five inches high. There are beds of fresh green moss in the midst of the shallow water. What is that coarse sedge-like grass, rather broadly triangularish, two inches high in the water? This and the cress have been eaten, probably by the rabbits, whose droppings are abundant. I see where they have gnawed and chipped off the willow osiers. Common grass is quite green.

Here, where I come for the earliest flowers, I might also come for the earliest birds. They seek the same warmth and vegetation. And so probably with quadrupeds,—rabbits, skunks, mice, etc. I hear now, as I stand over the first skunk-cabbage, the notes of the first red-wings,<sup>2</sup> like the squeaking of a sign, over amid the maples yonder. Robins are peeping and flitting

<sup>1</sup> *Vide* 4th.

<sup>2</sup> Or grackles?

about. Am surprised to hear one sing regularly their morning strain, seven or eight rods off, yet so low and smothered with its ventriloquism that you would say it was half a mile off. It seems to be wooing its mate, that sits within a foot of it.

There are many holes in the surface of the bare, springy ground amid the rills, made by the skunks or mice, and now their edges are bristling with feather-like frostwork, as if they were the breathing-holes or nostrils of the earth.

That grass which had grown five inches on the 30th is apparently the cut-grass of the meadows. The withered blades which are drooping about the tufts are two feet long. I break the solid snow-bank with my feet and raise its edge, and find the stiff but tender yellow shoots beneath it. They seem not to have pierced it, but are prostrate beneath it. They have actually grown beneath it, but not directly up into it to any extent; rather flattened out beneath it.

Cross Fair Haven Pond to Lee's Cliff. The crowfoot and saxifrage seem remarkably backward; no growth as yet. But the catnip has grown even six inches, and perfumes the hillside when bruised. The columbine, with its purple leaves, has grown five inches, and one is flower-budded, apparently nearer to flower than anything there. *Turritis stricta* very forward, four inches high.

It is evident that it depends on the character of the season whether this flower or that is the most forward; whether there is more or less snow or cold or rain, etc. I am tempted to stretch myself on the bare ground above

the Cliff, to feel its warmth in my back, and smell the earth and the dry leaves. I see and hear flies and bees about. A large buff-edged butterfly flutters by along the edge of the Cliff, — *Vanessa antiopa*. Though so little of the earth is bared, this frail creature has been warmed to life again. Here is the broken shell of one of those large white snails (*Helix albolorbis*) on the top of the Cliff. It is like a horn with ample mouth wound on itself. I am rejoiced to find anything so pretty. I cannot but think it nobler, as it is rarer, to appreciate some beauty than to feel much sympathy with misfortune. The Powers are kinder to me when they permit me to enjoy this beauty than if they were to express any amount of compassion for me. I could never excuse them that.

A woodchuck has been out under the Cliff, and patted the sand, cleared out the entrance to his burrow.

Muskrat-houses have been very scarce indeed the past winter. If they were not killed off, I cannot but think that their instinct foresaw that the river would not rise. The river has been at summer level through the winter up to April!

I returned down the middle of the river to near the Hubbard Bridge without seeing any opening.

Some of the earliest plants are now not started because covered with snow, as the stellaria and shepherd's-purse. Others, like the *Carex Pennsylvanica*, the crowfoot, saxifrage, callitrichie, are either covered or recently uncovered. I think it must be partly owing to the want of rain, and not wholly to the snow, that the first three are so backward.

The white maples and hazels and, for the most part, the alders still stand in snow; yet those alders on the bare place by the skunk-cabbage, above named, appear to be no more forward! Maybe trees, rising so high, are more affected by cold winds than herbaceous plants.

*April 3.* When I awoke this morning I heard the almost forgotten sound of rain on the roof. I think there has not been any of any consequence since Christmas Day. Looking out, I see the air full of fog, and that the snow has gone off wonderfully during the night. The drifts have settled and the patches of bare ground extended themselves, and the river is fast spreading over the meadows. The pattering of the rain is a soothing, slumberous sound, which tempts me to lie late, yet there is more fog than rain. Here, then, at last, is the end of the sleighing, which began the 25th of December. Not including that date and to-day it has lasted ninety-nine days. I hear that young Demond of the Factory will have come into town one hundred times in his sleigh the past winter, if he comes to-day, having come probably only once in a day.

P. M. — To Hunt's Bridge.

It is surprising how the earth on bare south banks begins to show some greenness in its russet cheeks in this rain and fog, — a precious emerald-green tinge, almost like a green mildew, the growth of the night, — a green blush suffusing her cheek, heralded by twittering birds. This sight is no less interesting than the corresponding bloom and ripe blush of the fall. How encouraging to perceive again that faint tinge of green,

spreading amid the russet on earth's cheeks! I revive with Nature; her victory is mine. This is my jewelry. It rains very little, but a dense fog, fifteen or twenty feet high, rests on the earth all day, spiriting away the snow, — behind which the cockerels crow and a few birds sing or twitter. The osiers look bright and fresh in the rain and fog, like the grass. Close at hand they are seen to be beaded with drops from the fog. There seems to be a little life in the bark now, and it strips somewhat more freely than in winter. What a lusty growth have these yellow osiers! Six feet is common the last year, chiefly from the summit of the pollards, — but also from the sides of the trunk, — filling a quadrant densely with their yellow rays. The white maple buds on the south side of some trees have slightly opened, so that I can peep into their cavities and detect the stamens.<sup>1</sup> They will probably come next to the skunk-cabbage this year, if the cowslip does not. Yet the trees stand in the midst of the old snow.

I see small flocks of robins running on the bared portions of the meadow. Hear the sprayey tinkle of the song sparrow along the hedges. Hear also, squeaking notes of an advancing flock of red-wings,<sup>2</sup> somewhere high in the sky. At length detect them high overhead, advancing northeast in loose array, with a broad extended front, competing with each other, winging their way to some northern meadow which they remember. The note of

<sup>1</sup> This happened in February (!), 1857.

<sup>2</sup> Or grackles; am uncertain which makes that squeak.

some is like the squeaking of many signs, while others accompany them with a steady dry *tchuck, tchuck*.

Hosmer is overhauling a vast heap of manure in the rear of his barn, turning the ice within it up to the light; yet he asks despairingly what life is for, and says he does not expect to stay here long. But I have just come from reading Columella, who describes the same kind of spring work, in that to him new spring of the world, with hope, and I suggest to be brave and hopeful with nature. Human life may be transitory and full of trouble, but the perennial mind, whose survey extends from that spring to this, from Columella to Hosmer, is superior to change. I will identify myself with that which did not die with Columella and will not die with Hosmer.<sup>1</sup>

Coming home along the causeway, a robin sings (though faintly) as in May. The road is a path, here and there shovelled through drifts which are considerably higher than a man's head on each side.

People are talking about my Uncle Charles. Minott tells how he heard Tilly Brown once asking him to show him a peculiar (inside?) lock in wrestling. "Now, don't hurt me, don't throw me hard." He struck his antagonist inside his knees with his feet, and so deprived him of his legs. Hosmer remembers his tricks in the barroom, shuffling cards, etc. He could do anything with cards, yet he did not gamble. He would toss up his hat, twirling it over and over, and catch it on his head invariably. Once wanted to live at Hosmer's, but the latter was afraid of him. "Can't we study up something?" he asked. H. asked him into the house

<sup>1</sup> [Channing, p. 88.]

and brought out apples and cider, and Charles talked. "You!" said he, "I burst the bully of Lowell" (or Haverhill?). He wanted to wrestle; would not be put off. "Well, we won't wrestle in the house." So they went out to the yard, and a crowd got round. "Come spread some straw here," said C. "I don't want to hurt him." He threw him at once. They tried again. He told them to spread more straw and he "burst" him.

He had a strong head and never got drunk; would drink gin sometimes, but not to excess. Did not use tobacco, except snuff out of another's box sometimes. Was very neat in his person. Was not profane, though vulgar.

Very few men take a wide survey; their knowledge is very limited and particular. I talked with an old man the other day about the snow, hoping he would give me some information about past winters. I said, "I guess you don't remember so much old snow on the ground at this season." He answered, "I never saw the snow so deep between my house and John's." It was n't a stone's throw.<sup>1</sup>

Uncle Charles used to say that he hadn't a single tooth in his head. The fact was they were all double, and I have heard that he lost about all of them by the time he was twenty-one. Ever since I knew him he could swallow his nose.

The river is now generally and rapidly breaking up. It is surprising what progress has been made since yesterday. It is now generally open about the town. It has gradually worn and melted away at the bends,

<sup>1</sup> The same man in summer of '59 said he never saw the river so low! Of what use to be old?

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where it is shallow and swift, and now small pieces are breaking off around the edges and floating down these reaches. It is not generally floated off, but dissolved and melted where it is, for the open reaches gradually extend themselves till they meet, and there is no space or escape for floating ice in any quantity, until the ice is all gone from the channel. I think that what I have seen floating in former years is *commonly* such as had risen up afterward from the bottom of flooded meadows. Sometimes, however, you observe great masses of floating ice, consisting of that which is later to break up, the thicker and more lasting ice from broad bays or between bridges. There is now an open water passage on each side of the broad field of ice in the bay above the railroad. The water, which is rapidly rising, has overflowed the icy snow on the meadows, which is seen a couple of feet beneath it, for there is no true ice there. It is this rising of the water that breaks up the ice more than anything. The Mill Brook has risen much higher comparatively than the river.

### April 4. P. M.—To Clamshell, etc.

The alder scales south of the railroad, beyond the bridge, are loosened. This corresponds to the opening (not merely expansion showing the fuzziness) of the white maple buds.

There is still but little rain, but the fog of yesterday still rests on the earth. My neighbor says it is the frost coming out of the ground. This, perhaps, is not the best description of it. It is rather the moisture in this warm air, condensed by contact with the snow and ice

and frozen ground. Where the fields are bare I slump now three or four inches into the oozy surface, also on the bare brows of hills clad with cladonias. These are as full of water as a sponge. The muskrats, no doubt, are now being driven out of the banks. I hear, as I walk along the shore, the dull sound of guns — probably most of them fired at muskrats — borne along the river from different parts of the town; one every two or three minutes.

Already I hear of a small fire in the woods in Emerson's lot, set by the engine, the leaves [*sic*] that are bare are so dry.

I find many sound cabbages shedding their pollen under Clamshell Hill. They are even more forward *generally* here than at Well Meadow. Probably two or three only, now dead among the alders at the last place, were earlier. This is simply the earliest flower such a season as this, *i. e.* when the ground continues covered with snow till very late in the spring. For this plant occupies ground which is the earliest to be laid bare, those great dimples in the snow about a springy place in the meadow, five or ten feet over, where the sun and light have access to the earth a month before it is generally bare. In such localities, then, they will enjoy the advantage over most other plants, for they will not have to contend with abundance of snow, but only with the cold air, which may be no severer than usual. Cowslips and a few other plants sometimes enjoy the same advantage. Sometimes, *apparently*, the original, now outer, spathe has been frost-bitten and is decayed, and a fresh one is pushing up. I see some

of these in full bloom, though the opening to their tents is not more than half an inch wide. They are lapped like tent doors, effectually protected. Methinks most of these hoods open to the south. It is remarkable how completely the spadix is protected from the weather, first by the ample hood, whose walls are distant from it, next by the narrow tent-like doorway, admitting air and light and sun, generally I think on the south side, and also by its pointed top, curved downward protectingly over it. It looks like a monk in his crypt with powdered head. The sides of the doorway are lapped or folded, and one is considerably in advance of the other. It is contrived best to catch the vernal warmth and exclude the winter's cold. Notwithstanding all the snow the skunk-cabbage is earlier than last year, when it was also the earliest flower and blossomed on the 5th of April. It is, perhaps, owing to the long-continued warm weather from March 13th to 28th.

Yet it has been a hard winter for many plants, on dry, exposed hills. I am surprised to see the clover, cinquefoil, etc., etc., on the top of the bank at Clamshell completely withered and straw-colored, probably from the snow resting on it so long and incessantly. And plants that grow on high land are more backward than last year.

The ground no sooner begins to be bare to a considerable extent than I see a marsh hawk, or harrier.

The sap of the *white* birch at Clamshell begins to flow.

*April 5.* The April weather still continues. It looks repeatedly as if the sun would shine, and it rains five

minutes after. I look out to see how much the river has risen. Last night there were a great many portions or islets visible, now they are engulfed, and it is a smooth expanse of water and icy snow. The water has been steadily deepening on Concord meadows all night, rising with a dimple about every stem and bush.

P. M. — To North River at Tarbell's.

Fair weather again. Saw half a dozen blackbirds, uttering that sign-like note, on the top of Cheney's elm, but noticed no red at this distance. Were they grackles? Hear after some red-wings sing *boby-lee*. Do these ever make the sign-like note? Is not theirs a fine shrill *whistle*?

The ice from the sides of the rivers has wheeled round in great cakes and lodged against each of the railroad bridges, *i. e.* over each stream. Near the town there is the firmest body of ice (in the river proper) above Hubbard's Bridge.

A warm and pleasant afternoon. The river not yet so high by four or five feet as last winter. Hear, on all sunny hillsides where the snow is melted, the chink-clicking notes of the *F. hyemalis* flitting before me. I am sitting on the dried grass on the south hillside behind Tarbell's house, on the way to Brown's. These birds know where there is a warm hillside as well as we. The warble of the bluebird is in the air. From Tarbell's bank we had looked over the bright moving flood of the Assabet with many maples standing in it, the purling and eddying stream, with a hundred rills of snow water trickling into it.

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Further toward J. P. Brown's, saw two large ant-hills (red before, black abdomens), quite covered on all the sunny portion with ants, which appeared to have come forth quite recently and were removing obstructions from their portals. Probably the frost is quite out there. Their black abdomens glistened in the sun. Each was bringing up some rubbish from beneath.

The outlines of one of these hills were a very regular cone; both were graceful curves. Came out upon the high terrace behind Hosmer's, whence we overlooked the *bright-blue* flood alternating with fields of ice (we being on the same side with the sun). The first sight of the blue water in the spring is exhilarating.

Saw half a dozen white sheldrakes in the meadow, where Nut Meadow Brook was covered with the flood. There were two or three females with them. These ducks would all swim together first a little way to the right, then suddenly turn together and swim to the left, from time to time making the water fly in a white spray, apparently with a wing. Nearly half a mile off I could see their green crests in the sun. They were partly concealed by some floating pieces of ice and snow, which they resembled.

On the hill beyond Clamshell scared up two turtle doves.

It is that walking when we must pick the hardest and highest ground or ice, for we commonly sink several inches in the oozy surface.

*April 6. 7 a. m.* — To Willow<sup>1</sup> Bay.

The meadow has frozen over, skimmed over in the

<sup>1</sup> That is, Lily.

night. The ducks must have had a cold night of it. I thought [I] heard white-bellied swallows over the house before I arose.<sup>1</sup> The hedges resound with the song of the song sparrow. He sits high on a spray singing, while I stand near, but suddenly, becoming alarmed, drops down and skulks behind the bushes close to the ground, gradually removing far to one side. I am not certain but I have seen the grass-bird<sup>2</sup> as well as song sparrow this year, — on the 2d, — a sparrow with a light breast and less brown about the cheeks and head. The song sparrow I see now has a very brown breast. What a sly, skulking fellow! I have a glimpse of him skulking behind a stone or a bush next to the ground, or perhaps he drops into a ditch just before me, and when I run forward he is not to be seen in it, having flitted down it four or five rods to where it intersected with another, and then up that, all beneath the level of the surface, till he is in the rear of me.

Just beyond Wood's Bridge, I hear the pewee. With what confidence after the lapse of many months, I come out to this waterside, some warm and pleasant spring morning, and, listening, hear, from farther or nearer, through the still concave of the air, the note of the first pewee! If there is one within half a mile, it will be here, and I shall be sure to hear its simple notes from those trees, borne over the water. It is remarkable how large a mansion of the air you can explore with your ears in the still morning by the waterside.

<sup>1</sup> Probably, for they surely came next morning. They twitter over the house only in the morning at first.

<sup>2</sup> No, probably not, for it has no dark splashes on throat. *Vide* 7th.

I can dig in the garden now, where the snow is gone, and even under six inches of snow and ice I make out to get through the frost with a spade. The frost will all be out about as soon as last year, for the melting of the snow has been taking it out. It is remarkable how rapidly the ground dries, for where the frost is out the water does not stand, but is soaked up.

There has been no skating the last winter, the snow having covered the ice immediately after it formed and not melting, and the river not rising till April, when it was too warm to freeze thick enough.

As we sat yesterday under the warm, dry hillside, amid the *F. hyemalis* by Tarbell's, I noticed the first bluish haze—a small patch of it—over the true Nut Meadow, seen against the further blue pine forest over the near low yellow one. This was of course the subtle vapor which the warmth of the day raised from Nut Meadow. This, while a large part of the landscape was covered with snow, an affecting announcement of the approach of summer. The one wood seemed but an underwood on the edge of the other, yet all Nut Meadow's varied surface intervened, with its brook and its cranberries, its sweet-gale, alder, and willow, and this was its blue feather!

P. M. — To Hubbard's second grove, by river.

At Ivy Tree, hear the fine *tseep* of a sparrow, and detect the fox-colored sparrow on the lower twigs of the willows and from time to time scratching the ground beneath. It is quite tame,—a single one with its ashy head and mottled breast.

It is a still and warm, overcast afternoon, and I am

come to look for ducks on the smooth reflecting water which has suddenly surrounded the village, — water half covered with ice or icy snow. On the 2d it was a winter landscape, — a narrow river covered thick with ice for the most part, and only snow on the meadows. In three or four days the scene is changed to these vernal lakes, and the ground more than half bare. The reflecting water alternating with unreflecting ice.

Apparently song sparrows may have the dark splash on each side of the throat but be more or less brown on the breast and head. Some are quite light, some quite dark. Here is one of the light-breasted on the top of an apple tree, sings unweariedly at regular intervals something like *tchulp | chilt chilt, chilt chilt*, (faster and faster) *chilt chilt, chilt chilt | tuller tchay ter splay-ee*. The last, or third, bar I am not sure about. It flew too soon for me. I only remember that the last part was sprinkled on the air like drops from a rill, as if its strain were moulded by the spray it sat upon. Now see considerable flocks of robins hopping and running in the meadows; crows next the water-edge, on small isles in the meadow.

As I am going along the Corner road by the meadow mouse brook, hear and see, a quarter of a mile northwest, on those conspicuous white oaks near the river in Hubbard's second grove, the crows buffeting some intruder. The crows had betrayed to me some large bird of the hawk kind which they were buffeting. I suspected it before I looked carefully. I saw several crows on the oaks, and also what looked to my naked eye like a cluster of the palest and most withered oak

leaves with a black base about as big as a crow. Looking with my glass, I saw that it was a great bird. The crows sat about a rod off, higher up, while another crow was occasionally diving at him, and all were cawing. The great bird was just starting. It was chiefly a dirty white with great broad wings with black tips and black on other parts, giving it the appearance of dirty white, barred with black. I am not sure whether it was a white-headed eagle or a fish hawk. There appeared much more white than belongs to either, and more black than the fish hawk has. It rose and wheeled, flapping several times, till it got under way; then, with its rear to me, presenting the least surface, it moved off steadily in its orbit over the woods northwest, with the slightest possible undulation of its wings, — a noble planetary motion, like Saturn with its ring seen edgewise. It is so rare that we see a large body self-sustained in the air. While crows sat still and silent and confessed their lord. Through my glass I saw the outlines of this sphere against the sky, trembling with life and power as it skimmed the topmost twigs of the wood toward some more solitary oak amid the meadows. To my naked eye it showed only so much black as a crow in its talons might. Was it not the white-headed eagle in the state when it is called the sea eagle? Perhaps its neck-feathers were erected.

I went to the oaks. Heard there a nuthatch's faint vibrating *tut-tut*, somewhat even like croaking of frogs, as it made its way up the oak bark and turned head down to peck. Anon it answered its mate with a *gnah gnah*. Smelt a skunk on my return, at Hubbard's blue-

berry swamp, which some dogs that had been barking there for half an hour had probably worried, for I did not smell it when I went along first. I smelt this all the way thence home, the wind being southwest, and it was quite as perceptible in our yard as at the swamp. The family had already noticed it, and you might have supposed that there was a skunk in the yard, yet it was three quarters of a mile off, at least.

*April 7. Monday.* Launched my boat, through three rods of ice on the riverside, half of which froze last night. The meadow is skimmed over, but by mid-forenoon it is melted.

P. M. — Up river in boat.

The first boats I have seen are out to-day, after muskrats, etc. Saw one this morning breaking its way far through the meadow, in the ice that had formed in the night. How independent they look who have come forth for a day's excursion! Melvin is out, and Goodwin, and another boat still. They can just row through the thinnest of the ice. The first boat on the meadows is exciting as the first flower or swallow. It is seen stealing along in the sun under the meadow's edge. One breaks the ice before it with a paddle, while the other pushes or paddles, and it grates and wears against the bows.

We see Goodwin skinning the muskrats he killed this forenoon on bank at Lee's Hill, leaving their red and mutilated carcasses behind. He says he saw a few geese go over the Great Meadows on the 6th. The half of the meadows next the river, or more, is covered with

snow ice at the bottom, which from time to time rises up and floats off. These and more solid cakes from over the river clog the stream where it is least broken up, bridging it quite over. Great cakes rest against every bridge. We were but just able to get under the stone arches by lying flat and pressing our boat down, after breaking up a large cake of ice which had lodged against the upper side. Before we get to Clamshell, see Melvin ahead scare up two black ducks, which make a wide circuit to avoid both him and us. Sheldrakes pass also, with their heavy bodies. See the red and black bodies of more muskrats left on the bank at Clamshell, which the crows have already attacked. Their hind legs are *half-webbed*, the fore legs not at all. Their paunches are full apparently of chewed roots, yellowish and bluish. Goodwin says they are fatter than usual, perhaps because they have not been driven out of their holes heretofore. The open channel is now either over the river or on the upper side of the meadows next the woods and hills. Melvin floats slowly and quietly along the willows, watching for rats resting there, his white hound sitting still and grave in the prow, and every little while we hear his gun announcing the death of a rat or two. The dog looks on understandingly and makes no motion.

At the Hubbard Bridge, we hear the incessant note of the phœbe,—*pevet, pe-e-vet, peve'*,—its innocent, somewhat impatient call. Surprised to find the river not broken up just above this bridge and as far as we can see, probably through Fair Haven Pond. Probably in some places you can cross the river still on the ice.

Yet we make our way with some difficulty, through a very narrow channel over the meadow and drawing our boat over the ice on the river, as far as foot of Fair Haven. See clams, fresh-opened, and roots and leaf-buds left by rats on the edge of the ice, and see the rats there. By rocking our boat and using our paddles, we can make our way through the softened ice, six inches or more in thickness.

The tops of young white birches now have a red-pink color. Leave boat there.

See a yellow-spotted tortoise in a ditch; and a bay-wing sparrow. It has no dark splash on throat and has a light or gray head.

*April 8. 1 p. m.* — To boat at Cardinal Shore, and thence to Well Meadow and back to port.

Another very pleasant and warm day. The white-bellied swallows have paid us twittering visits the last three mornings. You must rush out quickly to see them, for they are at once gone again. Warm enough to do without greatcoat to-day and yesterday, though I carry it and put it on when I leave the boat.

Hear the crack of Goodwin's piece close by, just as I reach my boat. He has killed another rat. Asks if I am bound up-stream. "Yes, to Well Meadow." Says I can't get above the hay-path a quarter of a mile above on account of ice; if he could, he'd 'a' been at Well Meadow before now. But I think I will try, and he thinks if I succeed he will try it. By standing on oars, which sink several inches, and hauling over one cake of ice, I manage to break my way into an open canal

above, where I soon see three rats swimming. Goodwin says that he got twenty-four minks last winter, more than ever before in one season; trapped most, shot only two or three. From opposite Bittern Cliff, I pushed along, with more or less difficulty, to Well Meadow Brook. There was a water passage ten feet wide, where the river had risen beyond the edge of the ice, but not more than four or five feet was clear of the bushes and trees. By the side of Fair Haven Pond it was particularly narrow. I shoved the ice on the one hand and the bushes and trees on the other all the way. Nor was the passage much wider below, as far back as where I had taken my boat. For all this distance, the river *for the most part*, as well as all the pond, was an unbroken field of ice. I went winding my way and scraping between the maples. Half a dozen rods off on the ice, you would not have supposed that there was room for a boat there. In some places you could have got on to the ice from the shore without much difficulty. But all of Well Meadow was free of ice, and I paddled up to within a rod or two of where I found the cowslips so forward on the 2d. It is difficult pushing a boat over the meadows now, for even where the bottom is not covered with slippery snow ice which affords no hold to the paddle, the meadow is frozen and icy hard, for it thaws slowly under water. This meadow is completely open, because none of the snow ice has risen up. Sometimes you see a small piece that has been released come up suddenly, with such force as to lift it partly out of water, but, sinking again at once, it looks like a sheldrake which has dived at a distance.

There, in that slow, muddy brook near the head of Well Meadow, within a few rods of its source, where it winds amid the alders, which shelter the plants somewhat, while they are open enough now to admit the sun, I find two cowslips in full bloom, shedding pollen; and they may have opened two or three days ago; for I saw many conspicuous buds here on the 2d which now I do not see. Have they not been eaten off? Do we not often lose the earliest flowers thus? A little more, or if the river had risen as high as frequently, they would have been submerged. What an arctic voyage was this in which I find cowslips, the pond and river still frozen over for the most part as far down as Cardinal Shore!

Saw two marsh hawks this afternoon, circling low over the meadows along the water's edge. This shows that frogs must be out. Goodwin and Puffer both fired at one from William Wheeler's shore. They say they made him duck and disturbed his feathers some. The muskrats are now very fat. They are reddish-brown beneath and dark-brown above. I see not a duck in all this voyage. Perhaps they are moving forward this bright and warm day.

Was obliged to come down as far as Nut Meadow (being on the west side), before I could clear the ice, and, setting my sail, tack across the meadow for home, the wind northwesterly. The river is still higher than yesterday.

About 8.30 p. m., hear geese passing quite low over the river.

Found beneath the surface, on the sphagnum, near

the cowslips, a collection of little hard nuts with wrinkled shells, a little like nutmegs, perhaps bass nuts, collected after a freshet by mice! I noticed that the fibres of the alder roots in the same place were thickly [sic] with little yellow knubby fruit. Was not that clear light-brown snail in that sphagnum a different species from the common one in brooks? See a few cranberries and smell muskrats.

On the Fair Haven Cliff, crowfoot and saxifrage are very backward. That dense-growing moss on the rocks shows now a level surface of pretty crimson cups.

Noticed, returning, this afternoon, a muskrat sitting on the ice near a small hole in Willow Bay, so motionless and withal round and featureless, of so uniform a color, that half a dozen rods off I should not have detected him if not accustomed to observing them. Saw the same thing yesterday. It reminds me of the truth of the Indian's name for it, — "that sits in a round form on the ice." You would think it was a particularly round clod of meadow rising above the ice. But while you look, it concludes its meditations or perchance its meal, and deliberately takes itself off through a hole at its feet, and you see no more of it. I noticed five muskrats this afternoon without looking for them very carefully. Four were swimming in the usual manner, showing the vertical tail, and plunging with a half-somerset suddenly before my boat. While you are looking, these brown clods slide off the edge of the ice, and it is left bare. You would think that so large an animal, sitting right out upon the ice, would be sure to be seen or detected, but not so. A citizen might paddle within two rods and

not suspect them. Most countrymen might paddle five miles along the river now and not see one muskrat, while a sportsman a quarter of a mile before or behind would be shooting one or more every five minutes. The other, left to himself, might not be able to guess what he was firing at.

The marsh hawks flew in their usual irregular low tacking, wheeling, and circling flight, leisurely flapping and beating, now rising, now falling, in conformity with the contour of the ground. The last I think I have seen on the same beat in former years. He and his race must be well acquainted with the Musketicook and its meadows. No sooner is the snow off than he is back to his old haunts, scouring that part of the meadows that is bare, while the rest is melting. If he returns from so far to these meadows, shall the sons of Concord be leaving them at this season for slight cause?

River had risen so since yesterday I could not get under the bridge, but was obliged to find a round stick and roll my boat over the road.

*April 9. Wednesday.* Another fine day.

7 A. M.—To Trillium Woods.

Air full of birds. The line I have measured west of railroad is now just bare of snow, though a broad and deep bank of it lies between that line and the railroad. East of railroad has been bare some time. The line in Trillium Woods is apparently just bare also. There is just about as much snow in these woods now as in the meadows and fields around generally; *i. e.*, it is confined to the coldest sides, as in them. There is not so

much as on the east side of Lee's Hill. It is toward the north and east sides of the wood. Hence, apparently, in a level wood of this character the snow lies no longer than in adjacent fields divided by fences, etc., or even without them.

The air is full of birds, and as I go down the causeway, I distinguish the seringo note. You have only to come forth each morning to be surely advertised of each newcomer into these broad meadows. Many a larger animal might be concealed, but a cunning ear detects the arrival of each new species of bird. These birds give evidence that they prefer the fields of New England to all other climes, deserting for them the warm and fertile south. Here is their paradise. It is here they express the most happiness by song and action. Though these spring mornings may often be frosty and rude, they are exactly tempered to their constitutions, and call forth the sweetest strains.

The yellow birch sap has flowed abundantly, probably before the white birch.

8 A. M.—By boat to V. *palmaia*<sup>1</sup> Swamp for *white birch sap*.

Leave behind greatcoat. The waters have stolen higher still in the night around the village, bathing higher its fences and its dry withered grass stems with a dimple. See that broad, smooth vernal lake, like a painted lake. Not a breath disturbs it. The sun and warmth and smooth water and birds make it a carnival of Nature's. I am surprised when I perceive men

<sup>1</sup> *Muhlenbergii*.

going about their ordinary occupations. I presume that before ten o'clock at least all the villagers will have come down to the bank and looked over this bright and placid flood, — the child and the man, the housekeeper and the invalid, — even as the village beholds itself reflected in it. How much would be subtracted from the day if the water was taken away! This liquid transparency, of melted snows partially warmed, spread over the russet surface of the earth! It is certainly important that there be some priests, some worshippers of Nature. I do not imagine anything going on to-day away from and out of sight of the waterside.

Early aspen catkins have curved downward an inch, and began to shed pollen apparently yesterday. White maples also, the sunny sides of clusters and sunny sides of trees in favorable localities, shed pollen to-day.

I hear the note of a lark amid the other birds on the meadow. For two or three days, have heard delivered often and with greater emphasis the loud, clear, sweet *phebe* note of the chickadee, elicited by the warmth. Cut across Hosmer's meadow from Island to Black Oak Creek, where the river, still rising, is breaking over with a rush and a rippling. Paddled quite to the head of Pinxter Swamp, where were two black ducks amid the maples, which went off with a hoarse quacking, leaving a feather on the smooth dark water amid the fallen tree-tops and over the bottom of red leaves.

Set two sumach spouts in a large white birch in the southward swamp, and hung a tin pail to them, and set off to find a yellow birch. Wandering over that

high huckleberry pasture, I hear the sweet jingle of the *Fringilla junco*.

In a leafy pool in the low wood toward the river, hear a rustling, and see yellow-spot tortoises dropping off an islet, into the dark, stagnant water, and four or five more lying motionless on the dry leaves of the shore and of islets about. Their spots are not very conspicuous out of water, and in most danger. The warmth of the day has penetrated into these low, swampy woods on the northwest of the hill and awakened the tortoises from their winter sleep. These are the only kind of tortoise I have seen this year. Probably because the river did not rise earlier, and the brooks, and thaw them out. When I looked about, I saw the shining black backs of four or five still left, and when I threw snowballs at them, they would not move. Yet from time to time I walk four or five rods over deep snow-banks, slumping in on the north and east sides of hills and woods. Apparently they love to feel the sun on their shells.

As I walk in the woods where the dry leaves are just laid bare, I see the bright-red berries of the Solomon's-seal still here and there above the leaves, affording food, no doubt, for some creatures.

Not finding the birches, I returned to the first swamp and tapped two more white birches. They flow generally faster than the red or white maples when I tried them. I sit on a rock in the warm, sunny swamp, where the ground is bare, and wait for my vessels to be filled. It is perfectly warm and perhaps drier than ever here. The great butterflies, black with buff-edged wings, are fluttering about, and flies are buzzing over

this rock. The spathes of the skunk-cabbage stand thickly amid the dead leaves, the only obvious sign of vegetable life. A few rods off I hear some sparrows busily scratching the floor of the swamp, uttering a faint *tseep tseep* and from time to time a sweet strain. It is probably the fox-colored sparrow. These always feed thus, I think, in woody swamps, a flock of them rapidly advancing, flying before one another, through the swamp. A robin peeping at a distance is mistaken for a hyla. A gun fired at a muskrat on the other side of the island towards the village sounds like planks thrown down from a scaffold, borne over the water. Meanwhile I hear the sap dropping into my pail. The birch sap flows thus copiously before there is any other sign of life in the tree, the buds not visibly swollen. Yet the aspen, though in bloom, shows no sap when I cut it, nor does the alder. Will their sap flow later? Probably this birch sap, like the maple, flows little if any at night. It is remarkable that this dead-looking trunk should observe such seasons, — that a stock should distinguish between day and night.

When I return to my boat, I see the snow-fleas like powder, in patches on the surface of the smooth water, amid the twigs and leaves. I had paddled far into the swamp amid the willows and maples. The flood has reached and upset, and is floating off the chopper's corded wood. Little did he think of this thief. It is quite hazy to-day. The red-wing's *o'gurgle-ee-e* is in singular harmony with the sound and impression of the lapsing stream or the smooth, swelling flood beneath his perch. He gives expression to the flood. The water

reaches far in amid the trees on which he sits, and they seem like a water-organ played on by the flood. The sound rises up through their pipes. There was no wind, and the water was perfectly smooth,—a Sabbath stillness till 11 A. M. We have had scarcely any wind for a month.

Now look out for fires in the woods, for the leaves are never so dry and ready to burn as now. The snow is no sooner gone, — nay, it may still cover the north and west sides of hills, — when a day or two's sun and wind will prepare the leaves to catch at the least spark. Indeed these are such leaves as have never yet been wet, as have blown about and collected in heaps on the snow, and they would burn there in midwinter, though the fire could not spread much.

If the ground were *covered* with snow, would any degree of warmth produce a *blue* haze like this?

But such a fire can only run up the south and southwest sides of hills at this season. It will stop at the summit and not advance forward far, nor descend at all toward the north and east.

P. M. — Up railroad. A very warm day.

The *Alnus incana*, especially by the railroad opposite the oaks, sheds pollen. At the first-named alder saw a striped snake, which probably I had scared into the water from the warm railroad bank, its head erect as it lay on the bottom and swaying back and forth with the waves, which were quite high, though considerably above it. I stood there five minutes at least, and probably it could remain there an indefinite period.

The wind has now risen, a warm, but pretty stormy southerly wind, and is breaking up those parts of the river which were yet closed. The great mass of ice at Willow Bay has drifted down against the railroad bridge. I see no ducks, and it is too windy for muskrat-shooters. In a leafy pond by railroad, which will soon dry up, I see large skater insects, where the snow is not all melted. The willow catkins there near the oaks show the red of their scales at the base of the catkins dimly through their down,—a warm crimson glow or blush. They are an inch long, others about as much advanced but rounded. They will perhaps blossom by day after tomorrow, and the hazels on the hillside beyond as soon at least, if not sooner. They are loose and begin to dangle. The stigmas already peep out, minute crimson stars,—Mars. The skaters are as forward to play on the first smooth and melted pool, as boys on the first piece of ice in the winter. It must be cold to their feet.

I go off a little to the right of the railroad, and sit on the edge of that sand-crater near the spring by the railroad. Sitting there on the warm bank, above the broad, shallow, crystalline pool, on the sand, amid russet banks of curled early sedge-grass, showing a little green at base, and dry leaves, I hear one hyla peep faintly several times. This is, then, a degree of warmth sufficient for the hyla. He is the first of his race to awaken to the new year and pierce the solitudes with his voice. He shall wear the medal for this year. You hear him, but you will never find him. He is somewhere down amid the withered sedge and alder bushes there

by the water's edge, but where? From that quarter his shrill blast sounded, but he is silent, and a kingdom will not buy it again.

The communications from the gods to us are still deep and sweet, indeed, but scanty and transient,—enough only to keep alive the memory of the past. I remarked how many old people died off on the approach of the present spring. It is said that when the sap begins to flow in the trees our diseases become more violent. It is now advancing toward summer apace, and we seem to be reserved to taste its sweetness, but to perform what great deeds? Do we detect the reason why we also did not die on the approach of spring?

I measured a white oak stump, just sawed off, by the railroad there, averaging just two feet in diameter with one hundred and forty-two rings; another, near by, an inch and a half broader, had but one hundred and five rings.

While I am looking at the hazel, I hear from the old locality, the edge of the great pines and oaks in the swamp by the railroad, the note of the pine warbler. It sounds far off and faint, but, coming out and sitting on the iron rail, I am surprised to see it within three or four rods, on the upper part of a white oak, where it is busily catching insects, hopping along toward the extremities of the limbs and looking off on all sides, twice darting off like a wood pewee, two rods, over the railroad, after an insect and returning to the oak, and from time to time uttering its simple, rapidly iterated, cool-sounding notes. When heard a little within the wood, as he hops to that side of the oak, they sound

particularly cool and inspiring, like a part of the ever-green forest itself, the trickling of the sap. Its bright-yellow or golden throat and breast, etc., are conspicuous at this season,— a greenish yellow above, with two white bars on its bluish-brown wings. It sits often with loose-hung wings and forked tail.

Meanwhile a bluebird sits on the same oak, three rods off, pluming its wings. I hear faintly the warbling of one, apparently a quarter of a mile off, and [am] very slow to detect that it is even this one before me, which, in the intervals of pluming itself, is apparently practicing in an incredibly low voice.

The water on the meadows now, looking with the sun, is a far deeper and more exciting blue than the heavens.

The thermometer at 5 p. m. is  $66^{\circ} +$ , and it has probably been  $70^{\circ}$  or more; and the last two days have been nearly as warm.

This degree of heat, then, brings the *Fringilla junco*rum and pine warbler and awakes the hyla.

*April 10. Thursday.* — Fast-Day. — Some fields are dried sufficiently for the games of ball with which this season is commonly ushered in. I associate this day, when I can remember it, with games of baseball played over behind the hills in the russet fields toward Sleepy Hollow, where the snow was just melted and dried up, and also with the uncertainty I always experienced whether the shops would be shut, whether we should have an ordinary dinner, an extraordinary one, or none at all, and whether there would be more than one service at

the meeting-house. This last uncertainty old folks share with me. This is a windy day, drying up the fields; the first we have had for a long time.

Therien describes to me the diagonal notch he used to cut in maples and birches (not having heard of boring) and the half-round spout, cut out of chestnut or other straight-grained wood with a half-round chisel, sharpened and driven into a new-moon cut made by the same tool partly sidewise to the tree. This evidently injured the trees more than the auger. He says they used to boil the birch down to a syrup, and he thought that the black birch would run more than any tree.

P. M. — I set out to sail, the wind northwest, but it is so strong, and I so feeble, that I gave it up. The waves dashed over into the boat and with their sparkling wet me half through in a few moments. Our meadow looks as angry now as it ever can. I reach my port, and go to Trillium Wood to get yellow birch sap.

The Deep Cut is full of dust. This wind, unlike yesterday's, has a decidedly cold vein in it. The ditch by Trillium Wood is strewn with yellowish hemlock leaves, which are still falling. In the still warmer and broader continuation of this ditch, south of the wood, in the southwest recess, I see three or four frogs jump in, some probably large *Rana palustris*, others quite small. They are in before I see them plainly, and bury themselves in the mud before I can distinguish them clearly. They were evidently sitting in the sun by that leafy ditch in that still and warm nook. Let them beware of marsh hawks. I saw also four yellow-spot tor-

toises paddling about under the leaves on the bottom there. Once they were all together. This ditch is commonly dry in the summer.

The yellow birch sap runs very fast. I set three spouts in a tree one foot in diameter, and hung on a quart pail; then went to look at the golden saxifrage in Hubbard's Close. When I came back, the pail was running over. This was about 3 p. m. Each spout dropped about as fast as my pulse, but when I left, at 4 p. m., it was not dropping so fast. The red maples here do not run at all now, nor did they yesterday. Yet one up the Assabet did yesterday. Apparently the early maples have ceased to run.

We may now say that the ground is bare, though we still see a few patches or banks of snow on the hillsides at a distance, especially on the northeast sides of hills. You see much more snow looking west than looking east. Thus does this remarkable winter disappear at last. Here and there its veteran snow-banks spot the russet landscapes. In the shade of walls and north hillsides and cool hollows in the woods, it is panting its life away. I look with more than usual respect, if not with regret, on its last dissolving traces.

Is not that a jungermannia which so adorns the golden epidermis of the yellow birch with its fine fingers?

I boil down about two quarts of this yellow birch sap to two teaspoonfuls of a smart-tasting syrup. I stopped there; else should have boiled it all away. A slightly medicinal taste, yet not disagreeable to me. It yields but little sugar, then.

*April 11.* 8.30 A. M. — To Tarbell's to get black and canoe birch sap.

Going up the railroad, I see a male and female rusty grackle alight on an oak near me, the latter apparently a flaxen brown, with a black tail. She looks like a different species of bird. Wilson had heard only a *tchuck* from the grackle, but this male, who was courting his mate, broke into incipient warbles, like a bubble burst as soon as it came to the surface, it was so aerated. Its air would not be fixed long enough.

Set two spouts in a canoe birch fifteen inches [in] diameter, and two in a black birch two feet plus in diameter. Saw a kingfisher on a tree over the water. Does not its arrival mark some new movement in its finny prey? He is the bright buoy that betrays it! And hear in the old place, the pitch pine grove on the bank by the river, the pleasant ringing note of the pine warbler. Its *a-che, vitter vitter, vitter vitter, vitter vitter, vitter vitter*, yet rings through the open pine grove very rapidly. I also heard it at the old place by the railroad, as I came along. It is remarkable that I have so often heard it first in these two localities, *i. e.* where the railroad skirts the north edge of a small swamp densely filled with tall old white pines and a few white oaks, and in a young grove composed wholly of pitch pines on the otherwise bare, very high and level bank of the Assabet. When the season is advanced enough, I am pretty sure to hear its ringing note in both those places.

The hazel sheds pollen to-day; some elsewhere possibly yesterday. The sallow up railroad will, if it is pleasant, to-morrow.<sup>1</sup>

<sup>1</sup> Not till 13th.

When I cut or break white pine twigs now, the turpentine exudes copiously from the bark, even from twigs broken off in the fall and now freshly broken, clear as water, or crystal. How early did it?

The canoe birch sap flowed rather the fastest. I have now got four kinds of birch sap. That of the white birch is a little tinged brown, apparently by the bark; the others are colorless as water. I am struck by the coolness of the sap, though the weather may be warm. Like wild apples, it must be tasted in the fields, and then it has a very slightly sweetish and acid taste, and cool as iced water. I do not think I could distinguish the different kinds of birch with my eyes shut. I drank some of the black birch wine with my dinner for the name of it; but, as a steady drink, it is only to be recommended to outdoor men and foresters. Now is apparently the very time to tap birches of all kinds. I saved a bottleful each of the white, canoe, and black birch sap (the yellow I boiled), and, in twenty-four hours, they had all three acquired a slight brown tinge but the white birch the most brown. They were at first colorless. On the whole, I have not observed so much difference in the amount of sap flowing from the six kinds of trees which I have tapped as I have observed between different trees of the same kind, depending on position and size, etc. This flowing of the sap under the dull rinds of the trees is a tide which few suspect.

Though the snow melted so much sooner on the east side of the railroad causeway than on the west, I notice that it still lies in a broad, deep bank on the east side

of Cheney's row of arbor-vitæ, while the ground is quite bare on the west. Whence this difference?

A few more hylas peep to-day, though it is not so warm as the 9th.

These warm pleasant days I see very few ducks about, though the river is high.

The current of the Assabet is so much swifter, and its channel so much steeper than that of the main stream, that, while a stranger frequently cannot tell which way the latter flows by his eye, you can perceive the declination of the channel of the former within a very short distance, even between one side of a tree and another. You perceive the waters heaped on the upper side of rocks and trees, and even twigs that trail in the stream.

Saw a pickerel washed up, with a wound near its tail, dead a week at least. Was it killed by a fish hawk? Its oil, when disturbed, smoothed the surface of the water with splendid colors. Thus close ever is the fair to the foul. The iridescent, oily surface. The same object is ugly or beautiful, according to the angle from which you view it. Here, also, in the river wreck is the never-failing teazle, telling of the factory above, and sawdust from the mill. The *teased* river! These I do not notice on the South Branch.

I hear of one field plowed and harrowed, — George Heywood's. Frost out there earlier than last year.

You thread your way amid the rustling oak leaves on some warm hillside sloping to the south, detecting no growth as yet, unless the flower-buds of the amelanchier are somewhat expanded, when, glancing along the dry stems, in the midst of all this dryness, you detect

the crimson stigmas of the hazel, like little stars peeping forth, and perchance a few catkins are dangling loosely in the zephyr and sprinkling their pollen on the dry leaves beneath.

You take your way along the edge of some swamp that has been cleared at the base of some south hillside, where there is sufficient light and air and warmth, but the cold northerly winds are fended off, and there behold the silvery catkins of the sallows, which have already crept along their lusty osiers, more than an inch in length, till they look like silvery wands, though some are more rounded, like bullets. The lower part of some catkins which have lost their bud-scales emit a tempered crimson blush through their down, from the small scales within. The catkins grow longer and larger as you advance into the warmest localities, till at last you discover one catkin in which the reddish anthers are beginning to push from one side near the end, and you know that a little yellow flame will have burst out there by to-morrow, if the day is fair.

I might [have] said on the 8th: Behold that little hemisphere of green in the black and sluggish brook, amid the open alders, sheltered under a russet tussock. It is the cowslips' forward green. Look narrowly, explore the warmest nooks; here are buds larger yet, showing more yellow, and yonder see two full-blown yellow disks, close to the water's edge. Methinks they dip into it when the frosty nights come. Have not these been mistaken for dandelions?

Or, on the 9th: This still warm morning paddle your boat into yonder smooth cove, close up under the

south edge of that wood which the April flood is bathing, and observe the great mulberry-like catkins of yonder aspen curving over and downward, some already an inch or more in length, like great reddish caterpillars covered thickly with down, forced out by heat, and already the sides and ends of some are loose and of a pale straw-color, shedding their pollen. These, for their forwardness, are indebted to the warmth of their position.

Now for the white maple the same day: Paddle under yonder graceful tree which marks where is the bank of the river, though now it stands in the midst of a flood a quarter of a mile from land; hold fast by one of its trailing twigs, for the stream runs swiftly here. See how the tree is covered with great globular clusters of buds. Are there no anthers nor stigmas to be seen? Look upward to the sunniest side. Steady! When the boat has ceased its swaying, do you not see two or three stamens glisten like spears advanced on the sunny side of a cluster? Depend on it, the bees will find it out before noon, far over the flood as it is.

Seek out some young and lusty-growing alder (as on the 9th), with clear, shining, and speckled bark, in the warmest possible position, perchance where the heat is reflected from some bank or hillside and the water bathes its foot. The scales of the catkins generally are loosened, but on the sunniest cheek of the clump, behold one or two far more considerably loosened, wholly or partially dangling and showing their golden insides. Give the most forward of these a chuck, and you will get a few grains of its yellow dust in your hand. Some

will be in full bloom above, while their extremities are comparatively dead, as if struck with a palsy in the winter. Soon will come a rude wind and shake their pollen copiously over the water.

*April 12.* There is still a little snow ice on the north side of our house, two feet broad, a relic of the 25th of December. This is all there is on our premises.

According to Rees's Cyclopaedia, the sap of the birches is fermentable in its natural state. Also, "Ratray, the learned Scot, affirms, that he has found by experiment, that the liquor which may be drawn from the birch tree in the springtime is equal to the whole weight of the tree, branches, roots, and all together."

I think on the whole that, of the particular trees which I tapped, the yellow and canoe birches flowed the fastest.

Hazy all day, with wind from the west, threatening rain. Haze gets to be very thick and perhaps smoky in the afternoon, concealing distinct forms of clouds, if there are any. Can it have anything to do with fires in woods west and southwest? Yet it is warm.

5 P. M.—Sail on the meadow.

There suddenly flits before me and alights on a small apple tree in Mackay's field, as I go to my boat, a splendid purple finch. Its glowing redness is revealed when it lifts its wings, as when the ashes is blown from a coal of fire. Just as the oriole displays its gold.

The river is going down and leaving the line of its wrack on the meadow. It was at its height when the snow generally was quite melted here, i. e. yesterday.

Rains considerably in the evening. Perhaps this will raise the river again.<sup>1</sup>

*April 13. Sunday.* 8 A. M.—Up railroad.

Cold, and froze in the night. The sallow will not open till some time to-day.

I hear a bay-wing on the railroad fence sing—the rhythm—somewhat like, *char char* (or *here here*), *che che, chip chip chip* (fast), *chitter chitter chitter chit* (very fast and jingling), *tchea tchea* (jinglingly). It has another strain, considerably different, but a second also sings the above. Two on different posts are steadily singing the same, as if contending with each other, notwithstanding the cold wind.

P. M.—To Walden and Fair Haven Ponds.

Still cold and windy.

The early gooseberry leaf-buds in garden have burst,—now like small green frilled horns. Also the amelanchier flower-buds are bursting.

As I go down the railroad causeway, I see a flock of eight or ten bay-wing sparrows flitting along the fence and alighting on an apple tree. There are many robins about also. Do they not incline more to fly in flocks a cold and windy day like this?

The snow ice is now all washed and melted off of Walden, down to the dark-green clear ice, which appears to be seven or eight inches thick and is quite hard still. At a little distance you would mistake it for water; further off still, as from Fair Haven Hill, it is blue as in

<sup>1</sup> No.

summer. You can still get on to it from the southerly side, but elsewhere there is a narrow canal, two or three to twelve feet wide, next the shore. It may last four or five days longer, even if the weather is warm.

As I go by the Andromeda Ponds, I hear the *tut tut* of a few croaking frogs, and at Well Meadow I hear once or twice a prolonged stertorous sound, as from river meadows a little later usually, which is undoubtedly made by a different frog from the first.

Fair Haven Pond, to my surprise, is completely open. It was so entirely frozen over on the 8th that I think the finishing stroke must have been given to it but by last night's rain. Say then apparently April 13th (?).

Return over the Shrub Oak Plain and the Cliff. Still no cowslips nor saxifrage. There were alders out at Well Meadow Head, as large bushes as any. Can they be *A. serrulata*? *Vide* leaves by and by.

Standing on the Cliffs, I see most snow when I look southwest; indeed scarcely a particle in any other direction, far or near, from which and from other observations, I infer that there is most snow now under the northeast sides of the hills, especially in ravines there.

At the entrance to the Boiling Spring wood, just beyond the orchard (of Hayden), the northeast angle of the wood, there is still a snow-drift as high as the wall, or three and a half feet deep, stretching quite across the road at that height, and the snow reaches six rods down the road. I doubt if there is as much in the road anywhere else in the town. It is quite impassable there still to a horse, as it has been all winter. This is the heel of the winter.

Scare up two turtle doves in the dry stubble in Wheeler's hill field by the railroad. I saw two together once before this year; probably they have paired.

*April 14. Monday.* A raw, overcast morning.

8 A. M.—Up Assabet.

See one striped squirrel chasing another round and round the Island, with a faint squeak from time to time and a rustling of the dry leaves. They run quite near to the water.

Hear the flicker's cackle on the old aspen, and his tapping sounds afar over the water. Their tapping resounds thus far, with this peculiar ring and distinctness, because it is a hollow tree they select to play on, as a drum or tambour. It is a hollow sound which rings distinct to a great distance, especially over water.

I still find small turtle's eggs on the surface entire, while looking for arrowheads by the Island.

See from my window a fish hawk flying high west of the house, cutting off the bend between Willow Bay and the meadow, in front of the house, between one vernal lake and another. He suddenly wheels and, straightening out his long narrow wings, makes one circle high above the last meadow, as if he had caught a glimpse of a fish beneath, and then continues his course down the river.

P. M.—Sail to Hill by Bedford line.

Wind southwest and pretty strong; sky overcast; weather cool. Start up a fish hawk from near the swamp white oaks southwest of the Island, undoubtedly the one

of the morning. I now see that this is a much darker bird, both above and beneath, than that bird of the 6th. It flies quite low, surveying the water, in an undulating, buoyant manner, like a marsh hawk, or still more a nighthawk, with its long curved wings. He flies so low westward that I lose sight of him against the dark hill-side and trees.

The river is going down rapidly, yet the Hunt's Bridge causeway is but just bare. The south side of Ponkawtasset looks much greener and more forward than any part of the town I have noticed. It is almost like another season there. They are already plowing there.

I steer down straight through the Great Meadows, with the wind almost directly aft, feeling it more and more the farther I advance into them. They make a noble lake now. The boat, tossed up by the rolling bil-lows, keeps falling again on the waves with a chucking sound which is inspiring. There go a couple of ducks, which probably I have started, now sealing far away on motionless pinions, with a slight descent in their low flight, toward some new cove. Anon I scare up two black ducks which make one circle around me, reconnoitring and rising higher and higher, then go down the river. Is it they that so commonly practice this manœuvre? Peter's is now far behind on a forgotten shore. The boat moored beneath his hill is no longer visible, and the red russet hill which is my goal rises before me. I moor my boat to a tree at the base of this hill.

The waves are breaking with violence on this shore,

as on a sea-beach, and here is the first painted tortoise just cast up by them and lying on his back amid the stones, in the most favorable position to display his bright-vermilion marks, as the waves still break over him. He makes no effort to turn himself back, probably being weary contending with the waves. A little further is another, also at the mercy of the waves, which greatly interfere with its staid and measured ways, its head helplessly wagging with every billow. Their scales are very clean and bright now. The only yellow I notice is about the head and *upper* part of the tail. The scales of the back are separated or bordered with a narrow greenish-yellow edging.

Looking back over the meadow from the top of this hill, I see it regularly *watered* with foam-streaks from five to ten feet apart, extending quite across it in the direction of the wind. Washed up against this shore, I see the first dead sucker. You see nowadays on every side, on the meadow bottom, the miserable carcasses of the musquash stripped of their pelts. I saw one plunge from beneath the monument. There is much lumber—fencing-stuff, etc.—to be gathered now by those inclined.

I see an elm-top at the Battle-Ground covered [with blackbirds] uttering their *squeaks* and split whistles, as if they had not got their voices yet, and a coarse, rasping *tchuck* or *char*, not in this case from a crow blackbird.

Again I see the fish hawk, near the old place. He alights on the ground where there is a ridge covered with bushes, surrounded by water, but I scare him

again, and he finally goes off northeast, flying high. He had apparently stayed about that place all day fishing.

*April 15.* 6.30 A. M.—To Hill.

It is warmer and quite still; somewhat cloudy in the east. The water quite smooth, — April smooth waters. I hear very distinctly Barrett's sawmill at my landing. The purple finch is singing on the elms about the house, together with the robins, whose strain its resembles, ending with a loud, shrill, ringing *chilt chilt chilt chilt*. I push across the meadow and ascend the hill. The white-bellied swallows are circling about and twittering above the apple trees and walnuts on the hillside. Not till I gain the hilltop do I hear the note of the *Fringilla junco* (huckleberry-bird) from the plains beyond. Returned again toward my boat, I hear the rich watery note of the martin, making haste over the edge of the flood. A warm morning, over smooth water, before the wind rises, is the time to hear it. Near the water are many recent skunk probings, as if a drove of pigs had passed along last night, death to many beetles and grubs. From amid the willows and alders along the wall there, I hear a bird sing, *a-chitter chitter chitter chitter chitter chitter che che che che*, with increasing intensity and rapidity, and the yellow redpoll hops in sight. A grackle goes over (with two females), and I hear from him a sound like a watchman's rattle, — but little more musical.

What I think the *Aibus serrulata* (?) will shed pollen to-day on the edge of Catbird Meadow. Is that one at

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Brister's Spring and at Depot Brook crossing? Also grows on the west edge of Trillium Wood.

Coming up from the riverside, I hear the harsh rasping *char-r char-r* of the crow blackbird, like a very coarsely vibrating metal, and, looking up, see three flying over.

Some of the early willow catkins have opened in my window. As they open, they curve backwards, exposing their breasts to the light.

By 9 A. M. the wind has risen, the water is ruffled, the sun seems more permanently obscured, and the character of the day is changed. It continues more or less cloudy and rain-threatening all day.

First salmon and shad at Haverhill to-day.

Ed. Emerson saw a toad in his garden to-day, and, coming home from his house at 11 P. M., a still and rather warm night, I am surprised to hear the first loud, clear, prolonged ring of a toad, when I am near Charles Davis's house. The same, or another, rings again on a different key. I hear not more than two, perhaps only one. I had only thought of them as commencing in the warmest part of some day, but it would seem that [they] may first be heard in the night. Or perhaps this one may have piped in the day and his voice been drowned by day's sounds. Yet I think that this night is warmer than the day has been. While all the hillside else, perhaps, is asleep, this toad has just awaked to a new year. It was a rather warm, moist night, the moon partially obscured by misty clouds, all the village asleep, only a few lights to be seen in some windows, when, as I passed along under the warm hillside, I heard a clear,

shrill, prolonged ringing note from a toad, the first toad of the year, sufficiently countenanced by its Maker in the night and the solitude, and then again I hear it (before I am out of hearing, *i. e.* it is deadened by intervening buildings), on a little higher key. At the same time, I hear a part of the hovering note of my first snipe, circling over some distant meadow, a mere waif, and all is still again. A-lulling the watery meadows, fanning the air like a spirit over some far meadow's bay. And now for vernal sounds there is only the low sound of my feet on the Mill-Dam sidewalks.

*April 16.* I have not seen a tree sparrow, I think, since December.

5.30 A. M. — To Pinxter Swamp over Hill.

A little sunshine at the rising. I, standing by the river, see it first reflected from E. Wood's windows before I can see the sun. Standing there, I hear that same stertorous note of a frog or two as was heard the 13th, apparently from quite across all this flood, and which I have so often observed before. What kind is it? It seems to come from the edge of the meadow, which has been recently left bare. Apparently this low sound can be heard very far over the water. The robins sing with a will now. What a burst of melody! It gurgles out of all conduits now; they are choked with it. There is such a tide and rush of song as when a river is straightened between two rocky walls. It seems as if the morning's throat were not large enough to emit all this sound. The robin sings most before 6 o'clock now. I note

where some suddenly cease their song, making a quite remarkable vacuum.

As I walk along the bank of the Assabet, I hear the *yeep yeep yeep yeep*, or perhaps *peop*, of a fish hawk, repeated *quite fast*, but not so shrill and whistling as I think I have heard it, and directly I see his long curved wings undulating over Pinxter Swamp, now flooded.

From the hilltop I see bare ground appearing in ridges here and there in the Assabet meadow.

A grass-bird, with a sort of spot on its breast, sings, *here here hé, che che che, chit chit chit, t chip chip chip chip chip*. The latter part especially fast. The *F. junco* says, *phe phe phe ph-ph-p-p-p-p-p-p-p-p-p-p*, faster and faster: flies as I advance, but is heard distinctly still further off.

A moist, misty, rain-threatening April day. About noon it *does* mizzle a little. The robin sings throughout it. It is rather raw, tooth-achy weather.

P. M. — Round Walden.

The *Stellaria media* is abundantly out. I did not look for it early, it was so snowy. It evidently blossomed as soon after the 2d of April — when I may say the [snow] began to go off in earnest — as possible. The shepherd's-purse, too, is well out, three or four inches high, and may have been some days at least.

Cheney's elm shows stamens on the warm side pretty numerously. Probably that at Lee's Cliff a little earlier.

Plowing and planting are now going on commonly. As I go down the railroad, I see two or three teams in

the fields. Frost appears to be out of most soil. I see a pine warbler, much less yellow than the last, searching about the needles of the pitch and white pine. Its note is somewhat shorter, — a very rapid and continuous trill or jingle which I remind myself of by *vetter vetter vetter vetter vet'*, emphasizing the last syllable.

Walden is still covered with ice, which [is] still darker green and more like water than before. A large tract in the middle is of a darker shade and particularly like water. Mr. Emerson told me yesterday that there was a large tract of water in the middle! This ice trembles like a batter for a rod around when I throw a stone on to it. One as big as my fist, thrown high, goes through. It appears to be three or four inches thick. It extends quite to the shore on the north side and is there met by snow.

The needles of the pines still show where they were pressed down by the great burden of snow last winter. I see a maple twig eaten off by a rabbit four and a quarter feet from the ground, showing how high the snow was there. Golden saxifrage at Hubbard's Close. Frogs sit round Callitriché Pool, where the tin is cast. We have waste places — pools and brooks, etc., — where to cast tin, iron, slag, crockery, etc. No doubt the Romans and Ninevites had such places. To what a perfect system this world is reduced! A place for everything and everything in its place!

April 17. Was awakened in the night by a thunder and lightning shower and hail-storm — the old familiar burst and rumble, as if it had been rumbling somewhere

else ever since I heard it last, and had not lost the knack. I heard a thousand hailstones strike and bounce on the roof at once. What a clattering! Yet it did not last long, and the hail took a breathing-space once or twice. I did not know at first but we should lose our windows, the blinds being away at the painters'. These sounds lull me into a deeper slumber than before. Hail-storms are milked out of the first summer-like warmth; they belong to lingering cool veins in the air, which thus burst and come down. The thunder, too, sounds like the final rending and breaking up of winter; thus precipitous is its edge. The first one is a skirmish between the cool rear-guard of winter and the warm and earnest vanguard of summer. Advancing summer strikes on the edge of winter, which does not drift fast enough away, and fire is elicited. Electricity is engendered by the early heats. I love to hear the voice of the first thunder as of the toad (though it returns irregularly like pigeons), far away in *his* moist meadow where he is warmed to life, and see the flash of his eye.

Hear a chip-bird high on an elm this morning, and probably that was one I heard on the 15th. You would not be apt to distinguish the note of the earliest. I still see quite a snow-bank from my window on the hillside at the northeast end of Clamshell, say a northeast exposure. This is on the surface, but the snow lies there in still greater quantity, in two hollows where sand has been dug for the meadow, on the hillside, though sloping to the southeast, where it is quite below the general surface. We have had scarcely any rain this spring, and the snow has been melting very gradually in the sun.

P. M. — Start for Conantum in boat, wind southwest. I can hide my oars and sail up there and come back another day. A moist muggy afternoon, rain-threatening, true April weather, after a particularly warm and pleasant forenoon. The meadows are still well covered, and I cut off the bents. The red-wing goes over with his *cha-e-e che-e-e*, chatter, chatter, chatter. On Hubbard's great meadow I hear the sound of some fowl, perhaps a loon, rushing through the water, over by Dennis's Hill, and push for it. Meanwhile it grows more and more rain-threatening, — all the air moist and muggy, a great ill-defined cloud darkening all the west, — but I push on till I feel the first drops, knowing that the wind will take me back again. Now I hear ducks rise, and know by their hoarse quacking that they are black ones, and see two going off as if with one mind, along the edge of the wood.

Now comes the rain with a rush. In haste I put my boat about, raise my sail, and, cowering under my umbrella in the stern, with the steering oar in my hand, begin to move homeward. The rain soon fulls up my sail, and it catches all the little wind. From under the umbrella I look out on the scene. The big drops pepper the watery plain, the *aequor*, on every side. It is not a hard, dry pattering, as on a roof, but a softer, liquid pattering, which makes the impression of a double wateriness. You do not observe the drops descending but where they strike, for there they batter and indent the surface deeply like buckshot, and they, or else other drops which they create, rebound or hop up an inch or two, and these last you see, and also when they

fall back broken into small shot and roll on the surface. Around each shot-mark are countless circling dimples, running into and breaking one another, and very often a bubble is formed by the force of the shot, which floats entire for half a minute. These big shot are battering the surface every three inches or thicker. I make haste to take down my sail at the bridges, but at the stone arches forgot my umbrella, which was unavoidably crushed in part. Even in the midst of this rain I am struck by the variegated surface of the water, different portions reflecting the light differently, giving what is called a watered appearance. Broad streams of light water stretch away between streams of dark, as if they were different kinds of water unwilling to mingle, though all are equally dimpled by the rain, and you detect no difference in their condition. As if Nature loved variety for its own sake. It is a true April shower, or rain, — I think the first. It rains so easy, — has a genius for it and infinite capacity for [it]. Many showers will not exhaust the moisture of April.

When I get home and look out the window, I am surprised to see how it has greened the grass. It springs up erect like a green flame in the ditches on each side the road, where we had not noticed it before. Grass is born. There is a quite distinct tinge of green on the hillside seen from my window now. I did not look for the very first.

I learn from the papers that an unusual number of fruit trees have been girdled by the mice under the deep snow of the past winter. Immense damage has been done to nurseries and orchards. I saw where a prostrate

maple in the Great Meadows had been gnawed nearly bare.

Our river was *generally* breaking up on the 3d of April, though some parts were frozen till the 12th.

I see by the papers that the ice had left Lake St. Peter (St. Lawrence) the 12th. Another paper (of the 11th) has heard that the St. Lawrence was open from Quebec to Three Rivers, or before the Hudson. The ice on Lake Champlain was broken up on the 12th. Fair Haven Pond was quite open the 13th. The ice moved down the Penobscot, and the river opened the 15th. Lake Ontario was free of ice the 16th. The Kennebec is expected to open this week. (To-day is Thursday.) There is still ice in Walden.<sup>1</sup>

*April 18.* P. M.—To Lee's Cliff by boat.

A strong northwest wind. The waves were highest off Hubbard's second grove, where they had acquired their greatest impetus and felt the full force of the wind. Their accumulated volume was less beyond on account of the turn in the river. The greatest undulation is at the leeward end of the longest broad reach in the direction of the wind. I was steering there diagonally across the black billows, my boat inclined so as almost to drink water. Scare up the same two black ducks (and twice again). The under sides of their wings show quite light and silvery as they rise in the light.

Red maple stamens in some places project considerably, and it will probably blossom to-morrow if it is pleasant.<sup>2</sup>

<sup>1</sup> Opens 18th.

<sup>2</sup> *Vide* 23d.

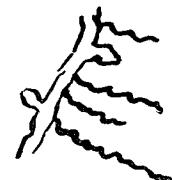
The farmer neglects his team to watch my sail. The slippery elm, with its round rusty woolly buds and pale-brown ashy twigs. That pretty, now brown-stemmed moss with green oval fruit. Common saxifrage and also early sedge I am surprised to find abundantly out—both—considering their backwardness April 2d. Both must have been out some, *i. e.* four or five, days half-way down the face of the ledge. Crowfoot, apparently two or three days. *Antennaria* at end of Cliff as you descend, say yesterday. *Turritis stricta*. Columbine, and already eaten by bees. Some with a hole in the side. It is worth the while to go there to smell the catnip. I always bring some home for the cat at this season.

See those great chocolate puffballs burst and diffusing their dust on the side of the hill. At the sandy place where I moored my boat, just this side this Cliff, the *Selaginella apus* is abundant, and on Conantum shore near elms thirty or forty rods below.

Left boat opposite Bittern Cliff.

Bear-berry grows by path from river, seven rods beyond last pine, south side, now strongly flower-budded. Observed a large mass of white lily root with the mud washed up, the woolly steel-blue root, with singular knobs for offshoots and long, large, succulent white roots from all sides, the leaf-buds yellow and lightly rolled up on each side. Small sallow next above *tristis*, three feet high, in path to Walden.

Walden is open entirely to-day for the first time,



owing to the rain of yesterday and evening. I have observed its breaking up of different years commencing in '45, and the average date has been April 4th.

This evening I hear the snipes *generally* and peeping of hylas from the door.

A small brown wasps' (?) nest (last year's, of course) hung to a barberry bush on edge of Lee's Cliff.

*April 19.* Was awakened in the night to a strain of music dying away, — passing travellers singing. My being was so expanded and infinitely and divinely related for a brief season that I saw how unexhausted, how almost wholly unimproved, was man's capacity for a divine life. When I remembered what a narrow and finite life I should anon awake to!

Though, with respect to our channels, our valleys, and the country we are fitted to drain, we are Amazons, we ordinarily live with dry channels.

The arbor-vitæ by riverside behind Monroe's appears to be just now fairly in blossom. I notice acorns sprouted. My birch wine now, after a week or more, has become pretty clear and colorless again, the brown part having settled and now coating the glass.

Helped Mr. Emerson set out in Sleepy Hollow two over-cup oaks, one beech, and two arbor-vitæs.

As dryness will open the pitch pine cone, so moisture closes it up again. I put one which had been open all winter into water, and in an hour or two it shut up nearly as tight as at first.

*April 20.* Rain, rain, rain, — a northeast storm. I

see that it is raising the river somewhat again. Some little islets which had appeared on the meadow northwest of Dodd's are now fast being submerged again.

*April 22.* It has rained two days and nights, and now the sun breaks out, but the wind is still easterly, and the storm probably is not over. In a few minutes the air is full of mizzling rain again.

8 A. M. — Go to my boat opposite Bittern Cliff.

Monroe's larches by river will apparently shed pollen soon. The staminate flowers look forward, but the pistillate scarcely show any red. There is snow still (of the winter) in the hollows where sand has been dug on the hillside east of Clamshell. Going through Hubbard's root-fence field, see a pigeon woodpecker on a fence-post. He shows his lighter back between his wings cassock-like and like the smaller woodpeckers. Joins his mate on a tree and utters the wooing note *o-week o-week*, etc.

The seringo also sits on a post, with a very distinct yellow line over the eye, and the *rhythm* of its strain is *ker chick | ker che | ker-char-r-r-r-r | chick*, the last two bars being the part chiefly heard. The huckleberry buds are much swollen. I see the tracks of some animal which has passed over Potter's sand, perhaps a skunk. They are quite distinct, the ground being smoothed and softened by rain. The tracks of all animals are much more distinct at such a time. By the path, and in the sandy field beyond, are many of those star-fingered puffballs. I think they must be those which are so white, like pigeons' eggs, in the fall, the thick, leathery rind

bursting into eight to eleven segments, like those of a boy's batting ball, and curving back. They are very pretty and remarkable now, sprinkled over the sand, smooth and plump on account of the rain. (I find some beyond at Mountain Sumach Knoll, smaller with a very thin rind and more turned back, a different species plainly.) The inside of the rind, which is uppermost, approaches a chocolate-color; the puffball is a rough dirty or brownish white; the dust which does not fly now at any rate is chocolate-colored. Seeing these thus open, I should know there had been wet weather.<sup>1</sup>

The mountain sumach berries have no redness now, though the smooth sumach berries have. Its twigs are slender and so have a small pith. Its heart-wood is not yellow, like the smooth and the dogwood, but green. Its bark is more gray than that of the smooth, which last, when wet, is slightly reddish. Its bark sap or juice is not yellow like that of the smooth, and is slower to harden.

Some hellebore leaves are opened in the Cliff Brook Swamp. My boat is half full of water. There are myriads of snow-fleas in the water amid the bushes, apparently washed out of the bark by the rain and rise of river.

I push up-stream to Lee's Cliff, behind Goodwin, who is after musquash. Many suckers and one perch have washed up on the Conantum shore, the wind being southeasterly. I do not detect any wound. Their eyes are white, — it would be worth while to see how long before this happens, — and they appear to have

<sup>1</sup> *Vide* two pages forward.

been dead some time; their fins are worn, and they are slimy. I cut open a sucker, and it looked rather yellow within. I also see sometimes their bladders washed up. They float on their backs. When cut open they sink, but the double bladder is uppermost and protruded as far as possible. Saw some pieces of a sucker recently dropped by some bird or beast, eight or ten rods from the shore. Much root and leaf-bud washed up. A gull. Very perfect and handsome clamshells, recently opened by the musquash, *i. e.* during the storm, lie on the meadow and the hillside just above water-mark. They are especially handsome because wet by the rain. I buy a male muskrat of Goodwin, just killed. He sometimes baits his mink-traps with muskrat; always with some animal food. The musquash does not eat this, though he sometimes treads on the trap and is caught. It rains hard and steadily again, and I sail before it. Now I see many more ducks than in all that fair weather, — sheldrakes, etc. A marsh hawk, in the midst of the rain, is skimming along the shore of the meadow, close to the ground, and, though not more than thirty rods off, I repeatedly lose sight of it, it is so nearly the color of the hillside beyond. It is looking for frogs. The small slate-colored hawk which I have called pigeon hawk darts away from a bushy island in the meadow.

The muskrat, which I bought for twelve cents, weighs three pounds, six ounces. Goodwin thought that some would weigh a half to three quarters of a pound more than this; I think a pound more. Thought this was a young one of last year, — judged by the tail,

— and that they hardly came to their growth in one year. Extreme length, twenty-three inches; length of *bare* tail, nine inches; breadth of tail, seven eighths of an inch; breadth of body, etc., as it lies, six and a half. An oval body, dark-brown above (black in some lights, the coarse wind hairs aft), reddish-brown beneath. Thus far the color of the hair. The fur within slate-color. Tail black; feet a delicate glossy dark slate (?), with white nails. The hind feet half webbed, and their sides and toes fringed thickly with stiff hair, apparently to catch water; ears (the head is wet and bruised), partly concealed in the fur, short and round; long black mustachial bristles; fore legs, quite short, more like hands; hind ones, about three inches without the line of the body's fur and hair. Tail, on the skin, is a little curved downwards.

The star fungi, as they dried in my chamber in the course of two or three hours, drew in the fingers. The different segments curled back tightly upon the central puff, the points being strongly curled downward into the middle dimple-wise. It requires wet weather, then, to expand and display them to advantage. They are hygrometers. Their coat seems to be composed of two thicknesses of different material and quality, and I should guess that the inside chocolate-colored had a great affinity for moisture and, being saturated with it, swelled, and so necessarily burst off and turned back, and perchance the outside dirty-white or pale-brown one expands with dryness.

A single male sheldrake rose from amid the alders against Holden Swamp Woods, as I was sailing down in

the rain, and flew with outstretched neck at right angles across my course, only four or five rods from me and a foot or two above the water, finally circling round into my rear.

Soon after I turned about in Fair Haven Pond, it began to rain hard. The wind was but little south of east and therefore not very favorable for my voyage. I raised my sail and, cowering under my umbrella in the stern, wearing the umbrella like a cap and holding the handle between my knees, I steered and paddled, almost perfectly sheltered from the heavy rain. Yet my legs and arms were a little exposed sometimes, in my endeavors to keep well to windward so as to double certain capes ahead. For the wind occasionally drove me on to the western shore. From time to time, from under my umbrella, I could see the ducks spinning away before me, like great bees. For when they are flying low directly from you, you see hardly anything but their vanishing dark bodies, while the rapidly moving wings or paddles, seen edgewise, are almost invisible. At length, when the river turned more easterly, I was obliged to take down my sail and paddle slowly in the face of the rain, for the most part not seeing my course, with the umbrella slanted before me. But though my progress was slow and laborious, and at length I began to get a little wet, I enjoyed the adventure because it combined to some extent the advantages of being at home in my chamber and abroad in the storm at the same time.

It is highly important to invent a dress which will enable us to be abroad with impunity in the severest

storms. We cannot be said to have fully invented clothing yet. In the meanwhile the rain-water collects in the boat, and you must sit with your feet curled up on a paddle, and you expose yourself in taking down your mast and raising it again at the bridges. These rain-storms — this is the third day of one — characterize the season, and belong rather to winter than to summer. Flowers delay their blossoming, birds tarry in their migrations, etc., etc. It is surprising how so many tender organizations of flowers and insects survive them uninjured.

The muskrat must do its swimming chiefly with its hind feet. They are similar in form and position to those of the sheldrake. Its broad oval and flattish body, too, must help keep it up.

Those star puffballs which had closed up in my chamber, put into water, opened again in a few hours.

What is that little bodkin-shaped bulb which I found washed up on the edge of the meadow, white with a few

small greenish rounded leafets? <sup>1</sup>



*a bac simile*

On the 19th, when setting out one of those overcup oaks in Sleepy Hollow, digging at the decayed stump of an apple tree, we disturbed, dug up, a toad, which probably had buried itself there last fall and had not yet come out.

April 23. P. M. — Up Assabet to white cedars.

The river risen again, on account of the rain of the

<sup>1</sup> *Ludwigia palustris*.

last three days, to nearly as high as on the 11th. I can just get over Hosmer's meadow. The red maple did not shed pollen on the 19th and could not on the 20th, 21st, or 22d, on account of rain; so this must be the first day, — the 23d, — though I see none quite so forward by the river. The wind is now westerly and pretty strong. No sap to be seen in the bass. The white birch sap flows yet from a stump cut last fall, and a few small bees, flies, etc., are attracted by it. Along the shore by Dove Rock I hear a faint *tseep* like a fox-colored sparrow, and, looking sharp, detect upon a maple a white-throated sparrow. It soon flies to the ground amid the birches two or three rods distant, a plump-looking bird and, with its bright white and yellow marks on the head distinctly separated from the slate-color, methinks the most brilliant of the sparrows. Those bright colors, however, are not commonly observed.

The white cedar swamp consists of hummocks, now surrounded by water, where you go jumping from one to another. The fans are now dotted with the minute reddish staminate flowers, ready to open. The skunk-cabbage leaf has expanded in one open place there; so it is at least as early as the hellebore of yesterday. Returning, when near the Dove Rock saw a musquash crossing in front. He dived without noise in the middle of the river, and I saw by a bubble or two where he was crossing my course, a few feet before my boat. He came up quietly amid the alders on my right, and lay still there with his head and back partly out. His back looked reddish-brown with a black grain混雜.

I think that that white root washed up since the ice broke up, with a stout stem flat on one side and narrow green or yellowish leaf-bud rolled up from each side, with a figure in the middle, is the yellow lily, and probably I have seen no pontederia. The white lily root is thickly clothed with a slate-blue fur or felt, close-fitting, reflecting prismatic colors under the microscope, but generally the slate-color of the fur of most animals, and perhaps it is designed to serve a similar use, *viz.* for warmth and dryness. The end of the root is abruptly rounded and sends forth leaves, and along the sides of the root are attached oval bulb-like offshoots, one or two inches long, with very narrow necks, ready, apparently, to be separated soon from the parent stock.

Hear the yellow redpoll sing on the maples below Dove Rock,—a peculiar though not very interesting strain, or jingle.

A very handsome little beetle, deep, about a quarter of an inch long, with pale-golden wing-cases, artificially and handsomely marked with burnished dark-green marks and spots, one side answering to the other; front and beneath burnished dark-green; legs brown or cinnamon-color. It was on the side of my boat. Brought it home in a clam's shells tied up,—a good insect-box.

*April 24.* A rain-threatening April day. Sprinkles a little in the forenoon.

P. M.—To mayflower.

The yellow willow peels fairly, probably for several days. Its buds are bursting and showing a little green,

at end of railroad bridge. On Money-Diggers' Shore, much large yellow lily root washed up; that white root with white fibres and yellowish leaf-buds. I doubt if I have seen any pontederia this year. I find, on the southeast side of Lupine Hill, nearly four rods from the water and a dozen feet above its level, a young *Emys picta*, one and five eighths inches long and one and a half wide. I think it must have been hatched year before last. It was headed up-hill. Its rear above was already covered with some kind of green moss (?) or the like, which probably had adhered or grown to it in its winter quarters.

Warren Miles at his new mill tells me that he found a mud turtle of middling size in his brook there last Monday, or the 21st. I saw a wood tortoise there. He has noticed several dead trout, the young man says, and eels, about the shore of the pond, which had apparently died in the winter, washed up about his mill, some that would weigh a pound, and thought that they had been killed by that strong-scented stagnant water of his pond. They could not get down. Also they can't get above his mill now, in the spring. He says that at his mill near the factory, where he used a small undershot wheel, eighteen inches in diameter, for grinding lead, he was prevented from grinding at night by the eels stopping the wheel. It was in August, and they were going down-stream. They never ran till about dark, nor after daylight, but at that season one would get under the wheel every five minutes and stop it, and it had to be taken out. There was not width enough beneath the wheel, a small undershot one, *i. e.* between

the wheel and the apron, to allow an eel of ordinary size to pass, and they were washed in sidewise so as to shut this space up completely. They were never troubled by them when going up, which he thought was in April. At the factory they can sometimes catch a bushel in a night at the same time in the box of wire in which they wash wool. Said that they had a wheel at the paper-mills above which killed every eel that tried to go through.

A Garfield (I judge from his face) confirmed the story of sheldrakes killed in an open place in the river between the factory and Harrington's, just after the first great snow-storm (which must have been early in January), when the river was all frozen elsewhere. There were three, and they persisted in staying and fishing there. He killed one.

The epigaea on the upper edge of the bank shows a good deal of the pink, and may open in two or three days if it is pleasant. *Equisetum arvense*, by path beyond second brook, probably yesterday. As usual, am struck with the forwardness of the dark patch of slender rush at the cowslip place.

Returning, in the low wood just this side the first Second Division Brook, near the meadow, see a brown bird flit, and behold my hermit thrush, with one companion, flitting silently through the birches. I saw the fox-color on his tail-coverts, as well as the brown streaks on the breast. Both kept up a constant jerking of the tail as they sat on their perches.

This season of rain and superabundant moisture makes attractive many an unsightly hollow and recess.

I see some roadside lakes, where the grass and clover had already sprung, owing to previous rain or melted snow, now filled with perfectly transparent April rain-water, through which I see to their emerald bottoms, — paved with emerald. In the pasture beyond Nut Meadow Brook Crossing, the unsightly holes where rocks have been dug and blasted out are now converted into perfect jewels. They are filled with water of crystalline transparency, paved with the same emerald, with a few hardhacks and meadow-sweets standing in them, and jagged points of rock, and a few skaters gliding over them. Even these furnish goblets and vases of perfect purity to hold the dews and rains, and what more agreeable bottom can we look to than this which the earliest moisture and sun had tinged green? We do not object to see dry leaves and withered grass at the bottom of the goblet when we drink, if these manifestly do not affect the purity of the water. What wells can be more charming? If I see an early grasshopper drowning in one, it looks like a fate to be envied.<sup>1</sup> Here is no dark unexplored bottom, with its imagined monsters and mud, but perfect sincerity, setting off all that it reveals. Through this medium we admire even the decaying leaves and sticks at the bottom.

The brook had risen so, owing to Miles's running his mill, that I could not get over where I did going.

April wells, call them, vases clean as if enamelled.<sup>2</sup>

There is a slight sea-turn. I saw it like a smoke beyond Concord from Brown's high land, and felt the cool fresh east wind. Is it not common thus early?

The old caterpillar-nests which now lie on the ground

<sup>1</sup> [Channing, p. 100.]

<sup>2</sup> [Ibid.]

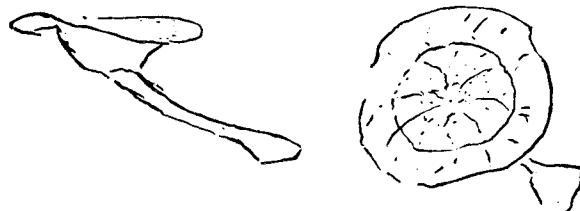
under wild cherry trees, and which the birds may use, are a quite light-colored cottony web, close and thick-matted, together with the dried excrement of caterpillars, etc., on the inside.

See a dog's-bane with two pods open and partially curved backward on each side, but a third not yet open. This soon opens and scatters its down and seeds in my chamber. The outside is a dull reddish or mahogany-



color, but the inside is a singularly *polished* very pale brown. The inner bark of this makes a strong twine like that of the milkweed, but there is not so much of it.

What is that now ancient and decayed fungus by the first mayflowers, — trumpet-shaped with a very broad mouth, the chief inner part green, the outer dark brown?



The earliest gooseberry leaf has spread a third of an inch or more.

Goodwin shot, about 6 P. M., and brought to me a cinereous coot (*Fulica Americana*) which was flying over the willows at Willow Bay, where the water now runs up.

It measures fourteen inches to end of tail; eighteen and one half to end of legs. Tail projects a half-inch beyond closed wings. Alar extent twenty-six inches. (These dimensions are somewhat stretched.) Above it is a bluish slate, passing into olive behind the wings, the primaries more brownish. Beneath, ash-color or pale slate. Head and neck, uniform deep black. Legs, clear green in front, passing into lead-color behind and on the lobes. Edging of wings, white; also the tips of the secondaries for one fourth of an inch, and a small space under the tail. Wings beneath, very light, almost silvery, slate. Vent, for a small space, black. Bill, bluish-white, with a chestnut bar near tip, and corresponding chestnut spot on each side of lower mandible and a somewhat diamond-shaped chestnut spot at base in front. No noticeable yellow on bill. Irides, reddish. No noticeable whitish spot beneath eyes; only bare lid. Legs and feet are very neat; talons very slender, curving, and sharp, the middle ones  $\frac{1}{2}$  inch + long. Lobes chiefly on the inner side of the toes. Legs bare half an inch above the joint. From its fresh and tender look I judge it to be a last year's bird. It is quite lousy.

According to Nuttall, they range from  $55^{\circ}$  north latitude to Florida and Jamaica and west to Oregon (?) and Mexico. Probably breed in every part of North

America,—even in Fresh Pond, he would imply,—but their nests, eggs, and breeding-habits are yet unknown. Nocturnal, hiding by day. In Florida in the winter. Come to Fresh Pond in September. A pair there in April, and seen with young birds in June. When alarmed utter a "hoarse *kruk.*" Called "flusterers" in Carolina, according to Lawson, because they fly trailing their legs or pattering with them over the water. Food: vegetables, also small shellfish, insects, gravel, etc. Leave the Northern States in November.

*April 25.* Minott tells me of David Wheeler of the Virginia Road, who used to keep an account of the comings and goings, etc., of animals. He was one of the few who knew [how] to set a trap for a fox so that he would get into it; scented it in a peculiar way, perhaps. Brought one home once on his shoulder, feigning death, which came to life suddenly in his entry and ran off with the trap.

Minott says that he could hardly raise cucumbers in his garden by the brook, the tortoises (painted, I judge, from his description) used to eat them so, both small and large, eating out the insides of the last. He sometimes found three or four there at once, and they lay all day hid among the vines.

Saw wasps about his dooryard.

P. M.—To Hill by boat.

Sweet-gale is out in some parts of the Island birch meadow, next the Indian field, probably several days, at least in some places. Larch not yet sheds pollen.

The toads have begun fairly to ring at noonday in

earnest. I rest awhile on my oars in this meadow amid the birches [?] to hear them. The wind is pretty strong and easterly. There are many, probably squatted about the edge of the falling water, in Merrick's pasture. (The river began to fall again, I think, day before yesterday.) It is a low, terrene sound, the undertone of the breeze. Now it sounds low and indefinitely far, now rises, as if by general consent, to a higher key, as if in another and nearer quarter,—a singular alternation. The now universal hard metallic ring of toads blended and partially drowned by the rippling wind. The voice of the toad, the herald of warmer weather.

The cinquefoil well out. I see two or three on the hemlock dry plain,—probably a day or two. I observe a male grackle with a brownish head and the small female on one tree, red-wings on another. Return over the top of the hill against the [wind]. The Great Meadows now, at 3.30 P. M., agitated by the strong easterly wind this clear day, when I look against the wind with the sun behind me, look particularly *dark blue*.

Aspen bark peels; how long?

I landed on Merrick's pasture near the rock, and when I stepped out of the boat and drew it up, a snipe flew up, and lit again seven or eight rods off. After trying in vain for several minutes to see it on the ground there, I advanced a step and, to my surprise, scared up two more, which had squatted on the bare meadow all the while within a rod, while I drew up my boat and made a good deal of noise. In short, I scared up twelve, one or two at a time, within a few rods, which were feeding on the edge of the meadow just laid bare,

each rising with a sound like *squeak squeak*, hoarsely. That part of the meadow seemed all alive with them. It is almost impossible to see one on the meadow, they squat and run so low, and are so completely the color of the ground. They rise from within a rod, fly half a dozen rods, and then drop down on the bare open meadow before your eyes, where there seems not stubble enough to conceal [them], and are at once lost as completely as if they had sunk into the earth. I observed that some, when finally scared from this island, flew off rising quite high, one a few rods behind the other, in their peculiar zigzag manner, rambling about high over the meadow, making it uncertain where they would settle, till at length I lost sight of one and saw the other drop down almost perpendicularly into the meadow, as it appeared.

5 P. M.—Went to see Tommy Wheeler's bounds.

Warren Miles had caught three more snapping turtles since yesterday, at his mill, one middling-sized one and two smaller. He said they could come down through his mill without hurt. Were they all bound down the brook to the river?<sup>1</sup> I brought home one of the small ones. It was seven and one eighth inches long. Put it in a firkin for the night, but it got out without upsetting it. It had four points on each side behind, and when I put it in the river I noticed half a dozen points or projections on as many of its rear plates, in keeping with the crest of its tail. It buried itself in the grassy bottom within a few feet of the shore. Moves off very flat on

<sup>1</sup> They all came down from the pond through the mill, and another one the 7th of May, *q. v.*

the bottom. These turtles have been disturbed or revealed by his operations.

Anne Karney, our neighbor, looking over her garden yesterday with my father, saw what she said was shamrock, which the Irish wear on their caps on St. Patrick's Day, the first she had ever seen in this country. My father pointed it out in his own garden to the Irishman who was working for him, and he was glad to see it, for he had had a dispute with another Irishman as to whether it grew in this country and now he could convince him, and he put it in his pocket. I saw it afterward and pronounced it common white clover, and, looking into Webster's Dictionary, I read, under Shamrock: "The Irish name for a three-leaved plant, the *Oxalis Acetosella*, or common wood-sorrel. It has been often supposed to be the *Trifolium repens*, white trefoil or white clover." This was very satisfactory, though perhaps Webster's last sentence should have been, The *Trifolium repens* has often been mistaken for it.

At evening see a speaker's light.

April 26. Worm-piles about the door-step this morning; how long?

The white cedar gathered the 23d does not shed pollen in house till to-day, and I doubt if it will in swamp before to-morrow.<sup>1</sup> Monroe's larch will, apparently, by day after to-morrow. The white birch at Clamshell, which I tapped long ago, still runs and is partly covered with a pink froth. Is not this the only birch which shows this colored froth, as its sap is the

<sup>1</sup> *Vide* 29th.

most tinged and most inclined to ferment? — a sort of mother which is left on the bark and in the hole.

Looked over hastily the first two hundred lines of Lucretius, but was struck only with the lines referring to Prometheus, whose *vivida vis animi*

"extra

Processit longe flammantia moenia mundi.

"But the custom of our ancestors also permitted these things on holidays: to pound wheat, cut torches, make candles, cultivate a hired vineyard, clear out and purge fish-ponds, ponds, and old ditches, mow grass ground a second time, spread dung, store up hay on scaffolds, gather the fruit of a hired olive yard, spread apples, pears, and figs, make cheese, bring home trees for the sake of planting on our shoulders or on a pack-mule, but not with one harnessed to a cart, nor to plant them when brought home, nor to open the ground, nor prune a tree, not even to attend to sowing seed, unless you have first sacrificed a puppy."<sup>1</sup>

This reminds me of my bringing home an apple tree on my shoulder one Sunday and meeting the stream of meeting-goers, who seemed greatly outraged; but they did not know whether I set it out or not that day, or but that I sacrificed a puppy if I did.

*April 27. P. M. — Up Assabet.*

I find none of Monroe's larch buds shedding pollen, but the anthers look crimson and yellow, and the female flowers are now fully expanded and very pretty, but small. I think it will first scatter pollen to-morrow.

<sup>1</sup> [Columella.]

Apparently a small bullfrog by riverside, though it looks somewhat like a *Rana fontinalis*; also two or three (apparently) *R. palustris* in that well of Monroe's, which have jumped in over the curb, perhaps. I see quite a number of tortoises out sunning, just on the edge of the Hosmer meadow, which is rapidly becoming bare. Their backs shine from afar in the sun. Also one *Emys insculpta* out higher up. From close by I hear a red-wing's clear, loud whistle, — not squeak (which I think may be confined to the grackle). It is like *pte'-a pte'-a*, or perhaps without the *p*.

The tapping of a woodpecker is made a more remarkable and emphatic sound by the hollowness of the trunk, the expanse of water which conducts the sound, and the morning hour at which I commonly hear it. I think that the pigeon woodpeckers must be building, they frequent the old aspen now so much.

At the Hemlocks I see a rock which has been moved since last fall seven or eight feet into the river, though the ground is but little descending. The rock is about five and a half feet by three by one. I see [a] rather large devil's-needle coursing over the low osiers in Pinxter Swamp. Is it not early for one? The white birch which I tapped in *V. palmata* Swamp still runs; and the holes are full of, and the base of the tree covered with, a singular sour-tasted, rather hard-crusted *white* (not pink) froth, and a great many of those flat beetles (?), lightning-bug-like, and flies, etc., are sucking it.

*April 28. Surveying the Tommy Wheeler farm.<sup>1</sup>*

<sup>1</sup> I believe it was this morning there was quite a fog.

Again, as so many times, I [am] reminded of the advantage to the poet, and philosopher, and naturalist, and whomsoever, of pursuing from time to time some other business than his chosen one, — seeing with the side of the eye. The poet will so get visions which no deliberate abandonment can secure. The philosopher is so forced to recognize principles which long study might not detect. And the naturalist even will stumble upon some new and unexpected flower or animal.

Mr. Newton, with whom I rode, thought that there was a peculiar kind of sugar maple which he called the white; knew of a few in the middle of Framingham and said that there was one on our Common.

How promising a simple, unpretending, quiet, somewhat reserved man, whether among generals or scholars or farmers! How rare an equanimity and serenity which are an encouragement to all observers! Some youthfulness, some manliness, some goodness. Like Tarbell, a man apparently made a deacon on account of some goodness, and not on account of some hypocrisy and badness as usual.

Is not the Hubbard Ditch plant the same I see in a Nut Meadow pool, and a remarkable evergreen? with much slime and many young snails on it?

I hear to-day frequently the *seezer seezer seezer* of the black and white creeper, or what I have referred to that, from J. P. Brown's wood bounding on Dugan.<sup>1</sup> It is not a note, nor a bird, to attract attention; only suggesting still warmer weather, — that the season has revolved so much further. See, but not yet hear, the familiar

<sup>1</sup> Can it be myrtle-birds?

chewink amid the dry leaves amid the underwood on the meadow's edge.

Many *Anemone nemorosa* in full bloom at the further end of Yellow Thistle Meadow, in that warm nook by the brook, some probably a day or two there. I think that they are thus early on account of Miles's dam having broken away and washed off all the snow for some distance there, in the latter part of the winter, long before it melted elsewhere. It is a warm corner under the south side of a wooded hill, where they are not often, if ever before, flooded.

As I was measuring along the Marlborough road, a fine little blue-slate butterfly fluttered over the chain. Even its feeble strength was required to fetch the year about. How daring, even rash, Nature appears, who sends out butterflies so early! Sardanapalus-like, she loves extremes and contrasts.<sup>1</sup>

I began to survey the meadow there early, before Miles's new mill had been running long this Monday morning and flooded it, but a great stream of water was already rushing down the brook, and it almost rose over our boots in the meadow before we had done.

Observing the young pitch pines by the road south of Loring's lot that was so heavily wooded, George Hubbard remarked that if they were cut down oaks would spring up, and sure enough, looking across the road to where Loring's white pines recently stood so densely, the ground was all covered with young oaks. *Mem.* — Let me look at the site of some thick pine woods which I remember, and see what has sprung up; *e. g.*

<sup>1</sup> [Channing, p. 104.]

the pitch pines on Thrush Alley and the white pines on Cliffs, also at Baker's chestnuts, and the chestnut lot on the Tim. Brooks farm.

This was a very pleasant or rather warm day, looking a little rainy, but on our return the wind changed to easterly, and I felt the cool, fresh sea-breeze.

This has been a remarkably pleasant, and I think warm, spring. We have not had the usual sprinklings of snow, having had so much in the winter, — none since [that] I can remember. There is none to come down out of the air.

*April 29.* Was awakened early this morning by thunder and some rain, — the second thunder-shower of the season, — but it proved a fair day. At mid-forenoon saw a fish hawk flying leisurely over the house northeasterly.

P. M. — To Cedar Swamp.

Monroe's larch staminate buds have now erected and separated their anthers, and they look *somewhat* withered, as if they had shed a part of their pollen. *If so*, they began yesterday.

It was quite warm when I first came out, but about 3 p. m. I felt a fresh easterly wind, and saw quite a mist in the distance produced by it, a sea-turn. There was the same phenomenon yesterday at the same hour, and on the 24th, later in the day. Yet to-day the air was not much cooled. Your first warning of it *may* be the seeing a thick mist on all the hills and in the horizon. The wind is southeast.

I see great devil's-needles whiz by, coupled.

Do not sail well till I reach Dove Rock, then glide swiftly up the stream. I move upward against the current with a moderate but fair wind, the waves somewhat larger, probably because the wind contends with the current. The sun is in my face, and the waves look particularly lively and sparkling. I can steer and write at the same time. They gurgle under my stern, in haste to fill the hollow which I have created. The waves seem to leap and roll like porpoises, with a slight surging sound when their crests break, and I feel an agreeable sense that I am swiftly gliding over and through them, bound on my own errands, while their motion is chiefly but an undulation, and an apparent one. It is pleasant, exhilarating, to feel the boat tossed up a little by them from time to time. Perhaps a wine-drinker would say it was like the effect of wine. It is flattering to a sense of power to make the wayward wind our horse and sit with our hand on the tiller. Sailing is much like flying, and from the birth of our race men have been charmed by it.

Near the little larch, scared a small dark-brown hawk from an apple tree, which flew off low to another apple tree beside Barrett's Pond. Just before he flew again I saw with my glass that his tail was barred with white. Must it not be a pigeon hawk then? He looked a dark slate as he sat, with tawny-white thighs and under head, — far off. He soon started a third time, and a crow seemed to be in chase of him. I think I have not described this white-barred hawk before, but for the black-barred *vide* May 8, 1854, and April 16, 1855.

The white cedar now sheds pollen abundantly.

Many flowers are effete, though many are not open. Probably it began as much as three days ago. I strike a twig, and its peculiar pinkish pollen fills the air. Sat on the knoll in the swamp, now laid bare. How pretty a red maple in bloom (they are now in prime), seen in the sun against a pine wood, like these little ones in the swamp against the neighboring wood, they are so light and ethereal, not a heavy mass of color impeding the passage of the light, and they are of so cheerful and lively a color.

The pine warbler is heard very much now at mid-day, when already most birds are quiet. It must be the female which has so much less yellow beneath. Do not the toads ring most on a windy day like this? I heard but few on the still 27th. A pigeon woodpecker alights on a dead cedar top near me. Its cackle, thus near, sounds like *eh eh eh eh eh*, etc., rapidly and emphatically repeated. Some birch sprouts in the swamp are leafed as much as any shrub or tree. Barn swallows and chimney, with white-bellied swallows, are flying together over the river. I thought before that I distinguished the twitter of the chimney swallow.

*April 30.* Surveying the Tommy Wheeler farm.

A fine morning. I hear the first brown thrasher singing within three or four rods of me on the shrubby hillside in front of the Hadley place. I think I had a glimpse of one darting down from a sapling-top into the bushes as I rode by the same place on the morning of the 28th. This, I think, is the very place to hear them early, a dry hillside sloping to the south, covered with young

wood and shrub oaks. I am the more attracted to that house as a dwelling-place. To live where you would hear the first brown thrasher! First, perchance, you have a glimpse of one's ferruginous long brown back, instantly lost amid the shrub oaks, and are uncertain if it was a thrasher, or one of the other thrushes; and your uncertainty lasts commonly a day or two, until its rich and varied strain is heard. Surveying seemed a noble employment which brought me within hearing of this bird. I was trying to get the exact course of a wall thickly beset with shrub oaks and birches, making an opening through them with axe and knife, while the hillside seemed to quiver or pulsate with the sudden melody. Again, it is with the side of the ear that you hear. The music or the beauty belong not to your work itself but some of its accompaniments. You would fain devote yourself to the melody, but you will hear more of it if you devote yourself to your work.

Cutting off the limbs of a young white pine in the way of my compass, I find that it strips freely. How long this?

By the time I have run through to the Harvard road, I hear the small pewee's *tche-vet'* repeatedly.

The Italian with his hand-organ stops to stare at my compass, just as the boys are curious about *his* machine. We have exchanged places.

As I go along the Assabet, a peetweet skims away from the shore. The canoe birch sap still flows. It is much like that of the white, and is now pink, white, and yellow on the bark.

Bluets out on the bank by Tarbell's spring brook, maybe a day or two.

This was a very warm as well as pleasant day, but at one o'clock there was the usual fresh easterly wind and sea-turn, and before night it grew quite cold for the season. The regularity of the recurrence of this phenomenon is remarkable. I have noticed [it], at least, on the 24th late in the day, the 28th and the 29th about 3 p. m., and to-day at 1 p. m. It has been the order. Early in the afternoon, or between one and four, the wind changes (I suppose, though I did not notice its direction in the forenoon), and a fresh cool wind from the sea produces a mist in the air.

About 3.30 p. m., when it was quite cloudy as well as raw, and I was measuring along the river just south of the bridge, I was surprised by the great number of swallows — white-bellied and barn swallows and perhaps republican — flying round and round, or skimming very low over the meadow, just laid bare, only a foot above the ground. Either from the shape of the hollow or their circling, they seemed to form a circular flock three or four rods in diameter and one swallow deep. There were two or three of these centres and some birds equally low over the river. It looked like rain, but did not rain that day or the next. Probably their insect food was flying at that height over the meadow at that time. There were a thousand or more of swallows, and I think that they had recently arrived together on their migration. Only this could account for there being so many together. We were measuring through one little circular meadow, and many of them were not driven off by our nearness. The noise of their wings and their twittering was quite loud.