

VI
AUGUST, 1859

(ÆT. 42)

Aug. 1. 6 A. M. — River is at summer level.

This being Monday morning, the river is probably lower than at any other time in the week.

Am surprised to see in water opposite between Monroe's and Dodd's the *Myriophyllum ambiguum* var. *natanans*, amid the *Bidens Beckii*. It must have been out (under water) a fortnight. A pretty sprig of pectinate leaflets above the capillary-leaved and slimy mass. The *B. Beckii* (just beginning to bloom) just shows a few green leaflets above its dark and muddy masses, now that the river is low. Evidently the above two and lilies, cardinal-flowers, etc., depend on the state of the river in June. After a very wet June I think there is less bloom on them. Some years the first two are not noticed at all.

We have now got down to the water milfoil and the *B. Beckii*. These might be called *low-water plants*.¹

The bottom is occasionally — though quite rarely in Concord — of soft shifting sand, ripple-marked, in which the paddle sinks, under four or five feet of water (as below the ash tree hole), and few weeds grow on such a shallow.

Evidently the hill at Hemlocks would be a flowing sand-hill, if it were not held together by the hemlocks.

¹ Vide Aug. 4th.

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The common cat-tail (about five feet high by railroad, beyond the South Bridge) has no interval between the two kinds of flowers, but mine of yesterday (*vide* [six] pages back) has, and yet it is much larger than the common. Can it, then, be the *Typha angustifolia*, which is described as smaller and rare?

I see a kingbird hovering within six inches above the potamogetons, front of Cheney's, and repeatedly snapping up some insects, perhaps a devil's-needle.¹

The west edge of the Rock above Island is eleven and a half inches above summer level.

Now, at 5 P. M., the river has risen an inch and a half since 6 A. M., though we have not had a drop of rain for three days, and then but a few drops, and it fell three quarters of an inch between yesterday (Sunday) morning and this morning. Is this rise owing to the water let on from various mill-ponds this Monday morning?

Aug. 2. I try the current above Dodd's.

There is a southwest breeze. A loose board moves faster than one with a sunk box, but soon drifts diagonally across and lodges at fifty feet.

The box, sunk fourteen inches below the board, floats one hundred feet in nine minutes; sunk two and a half feet, in nine and a quarter minutes; sunk five and a half feet, it is not half-way in thirteen minutes, or, allowing for its starting this time a little out of the wind and current, say it is twenty minutes in going a hundred feet.

I should infer from this that the swiftest and most un-

¹ Often afterward for weeks; stoops from the willows.

interrupted current under all conditions was neither at the surface nor the bottom, but nearer the surface than the bottom. If the wind is down-stream, it is at the surface; if up-stream, it is beneath it, and at a depth proportionate to the strength of the wind. I think that there never ceases to be a downward current.

Rudely calculating the capacity of the river here and comparing it with my boat's place, I find it about as two to one, and such is the slowness of the current, *viz.* nine minutes to four and a half to a hundred feet. If you are boating far it is extremely important to know the direction of the wind. If it blows strong up-stream, there will be a surface current flowing upward, another beneath flowing downward, and a very feeble one (in the lake-like parts) creeping downward next the bottom. A wind in which it is not worth the while to raise a sail will often blow your sailless boat up-stream.

The sluggishness of the current, I should say, must be at different places as the areas of cross-sections at those places.

That fine z-ing of locusts in the grass which I have heard for three or four days is, methinks, an August sound and is very inspiring. It is a certain maturity in the year which it suggests. My thoughts are the less crude for it. There is a certain moral and physical sluggishness and standstill at midsummer.

I think that clams are chiefly found at shallow and slightly muddy places where there is a gradually shelving shore. Are not found on a very hard bottom, nor in deep mud.

All of the river from the southwest of Wayland to off

the Height of Hill [*sic*] below Hill's Bridge is meadowy. This is the true Musketaquid.

The buttonwood bark strews the streets, — curled pieces. Is it not the effect of dry weather and heat? As birds shed their feathers, or moult, and beasts their hair. Neat rolls of bark (like cinnamon, but larger), light and dark brown.

Aug. 3. 6 A. M. — River fallen one inch since 2.30 P. M. yesterday; *i. e.*, it is now a quarter of an inch above summer level. *Juncus Greenei* grows in river meadow opposite Dodd's; long done.

I saw (the 31st *ult.*) that the river was narrowed to a third its width by a large mass of button-bushes sunk in the middle of it above the Sudbury causeway. The low water reveals a mass of meadow sunk under the railroad bridge. Both this and Lee's Bridge are thus obstructed this year.

I should say the origin of these holes was that the river, being shallow and therefore crowded, runs swiftly and digs into the bank and so makes a deep hole and a bend. The three large lakes may perhaps be considered as three deep holes made by a larger river or ocean current in former ages.

The almost constant occurrence of a bay, or stagnant expansion, on the convex side at the bends is remarkable. It seems to be a place where the river has formerly flowed, but which, by wearing into the opposite bank, it has left.

There are about twenty-one weedy places (*i. e.*, where the weeds extend quite across), all together about two

miles in length. These weedy places, you may say (notwithstanding the frequent winding of the river), generally occur at bends (the Island shoal, perhaps, and Barrett's Bar, and above Middlesex Turnpike Bridge are exceptions).

The most remarkable bend between Framingham and the Dam is the Ox-Bow in Framingham.

Since our river is so easily affected by wind, the fact that its general course is northeast and that the prevailing winds in summer are southwest is very favorable to its rapid drainage at that season.

If by fall you mean a swifter place occasioned by the bottom below for a considerable distance being lower than the bottom above for a considerable distance, I do not know of any such between Pelham Pond and the Falls. These swifter places are produced by a contraction of the stream, — chiefly by the elevation of the bottom at that point, — also by the narrowing of the stream.

The depths are very slight compared with the lengths. The average depth of this twenty-five miles is about one seventeen thousandth the length; so that if this portion of the river were laid down on a map four feet long the depth would be about equal to the thickness of ordinary letter paper, of which it takes three hundred and fifty to an inch. Double the thickness of the letter paper, and it will contain the deep holes which are so unfathomed and mysterious, not to say bottomless, to the swimmers and fishermen.

Methinks the button-bushes about Fair Haven indicate a muddy but not deep pond.

The deepest reach of this twenty-five miles is from E. Davis Hill to Skelton Bend.

Methinks I saw some of the fresh-water sponge in the river in Framingham.

Undoubtedly, in the most stagnant parts of the river, when the wind blows hard up-stream, a chip will be drifted faster up-stream than ever it floats downward *there* in a calm.

P. M. — I see two or three birds which I take to be rose-breasted grosbeaks of this year. They are speckled brown and white (with considerable white) birds, and no rose on breast that I see. I hear them singing a little in a grosbeak-like strain, but a more partial warble. Heard one July 28th on an oak high up Assabet, and to-day on an apple tree near Brister's.

Warren Miles tells me that in mowing lately he cut in two a checkered "adder," — by his account it was the chicken snake, — and there was in its stomach a green snake, dead and partly digested, and he was surprised to find that they ate them.

Water-bugs are collected in dense swarms about my boat, at its stagnant harbor. They gyrate in a very leisurely manner under my face, occasionally touching one another by their edges a moment. When I move or disturb the water, they at once begin to gyrate rapidly. After the evening has set in, I perceive that these water-bugs, which all day were collected in dense swarms in the stagnant water amid the weeds at the sides, are dispersed over the river (quite across it here) and gyrating rapidly in the twilight.

The haymakers are quite busy on the Great Meadows, it being drier than usual. It being remote from public view, some of them work in their shirts or half naked.

As I waded through the middle of the meadows in sedge up to my middle and look afar over the waving and rustling bent tops of the sedge (all are bent northeast by the southwest wind) toward the distant mainland, I feel a little as if caught by a rising tide on flats far from the shore. I am, as it were, cast away in the midst of the sea. It is a level sea of waving and rustling sedge about me. The grassy sea. You feel somewhat as you would if you were standing in water at an equal distance from the shore. To-day I can walk dry over the greater part of the meadows, but not over the lower parts, where pipes, etc., grow; yet many think it has not been so dry for ten years! Goodwin is there after snipes. I scare up one in the wettest part.

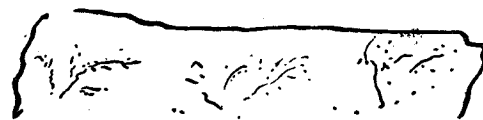
High blackberries begin to be ripe.

A novel phenomenon of dry weather and a low stage of water is the sight of dense green beds of *Eleocharis acicularis*, still in bloom, which grows at the bottom of muddy pools, but now, they being dry, looks like a dense fine bed of green moss, denser than grass. I recline on such a bed, perfectly dry and clean, amid the flags and pontederia, where lately was water and mud. It covers the mud with a short dense green mat of culms fine as a hair, quite agreeable to rest on and a rather novel sight.

Aug. 5. See many yellowed peach leaves and butter-nut leaves, which have fallen in the wind yesterday and the rain to-day.

The lowest dark-colored rocks near the water at the stone bridge (*i. e.* part of the bridge) are prettily marked with (apparently) mosses, which have adhered to them at higher water and [are] now withered and bleached on, — in fact are transferred, — and by their whitish color are seen very distinctly on the dark stone and have a very pretty effect. They are quite like sea-mosses in their delicacy, though not equally fine with many.

These are very permanently and



closely fastened to the rock. This is a phenomenon of low water. Also see them transferred to wood, as pieces of bridges.

Aug. 8. P. M. — Up Assabet.

I perceive that rocks on the bottom stretch across from Mantatuket Point to the Island, and probably make the ancient core of the shoals and islands, and the river has cut through above and between them and made them islands, just as it at high water cuts off and makes an island of Mantatuket Rock itself; *i. e.*, the shallows below the junction are to be considered as the point of the hill, at least the rocky portion of them.

I find the same curious eggs (which I saw at the Fordway on the 22d) on the rocks and trees on the Assabet, always on the upright, or steep, sides of rocks in the water or on bare-barked (or perhaps denuded of bark) trees on the edge of the river and overhanging

it. Are they to be found up the main stream? They are not yet hatched.¹

Pectweets take their flight over the water, several together, apparently the old with their young now grown, the former (?) uttering a peculiarly soft rippling call. That is, it is not now a sharp, ringing note.

The river, now that it is so clear and sunny, is better than any aquarium. Standing up and pushing gently up the stream, or floating yet more quietly down it, I can, in some places, see the secrets of half the river and its inhabitants, — the common and familiar bream with the dusty light reflected from its fins, the vigorous-looking perch, tiger-like among fishes (I notice that many of the perch are poised head downward, peeping under the rocks), the motionless pickerel with reticulated back and sides, as it were the seed-vessel of a water-plant, eyes set far back. It is an enchanter's wand ready to surprise you with life.

The weeds are as indispensable to the fishes as woods and shrubbery to us. I saw a perch conceal himself from my sight under a tuft of weeds at the bottom not much wider than its own length. That potamogeton (is it *P. Robbinsii*?) growing in dense beds under water, all immersed in shallow places, like a bed of brown and muddy ostrich-feathers, alternating with darker beds of *Bidens Beckii*, which show but a particle of green above the surface (I think of the latter in the South Branch), — what concealment these afford to turtles, frogs, fishes, etc.! The potamogetons are so thick in some places in the main stream that a frog might hop

¹ Vide Aug. 11th.

quite across the river on them without getting in over his head.

Rice has had a little experience once in pushing a canal-boat up Concord River. Says this was the way they used to get the boat off a rock when by chance it had got on to one. If it had run quite on, so that the rock was partly under the main bottom of the boat, they let the boat swing round to one side and placed a stout stake underneath, a little aslant, with one end on the bottom of the river and the other ready to catch the bows of the boat, and while one held it, perhaps, the other pushed the boat round again with all his force, and so drove it on to the stake and lifted it up above the rock, and so it floated off.

Aug. 9. I see under the railroad bridge a mass of meadow which lodged there last spring, not revealed till this low water, and this is now dense with a thrifty growth of bulrushes.

Minott says that some used to wonder much at the windings of the Mill Brook and could not succeed in accounting for them, but his Uncle Ben Prescott settled the difficulty by saying that a great eel came out of Flint's Pond and rooted its way through to the river and so made the channel of the Mill Brook.


Minott says that he can remember when (it may be forty or fifty years ago) the Great Meadows were so dry one year that, they having got off all the grass and cut it quite smoothly, they talked seriously of having a regimental muster there. He assured me it would have been a good place, for the grass was cut smooth, and the

earth was baked so hard that you could ride in a carriage right through the middle from the west end clear to Neck. Cannon could have been dragged about there perfectly well. I was thinking it would be rather *tussocky* ground for soldiers to wheel and manœuvre on, and rather damp to camp on, but he declared not. This appeared to be good evidence for the river meadow proprietors. But when I asked him if he thought the meadows were more wet now than fifty years ago, he answered that he did "not think they were," nor the grass any poorer. As he remembered, in one of those years, not far from the dry one referred to, there came a rain in August, when the meadows were partly cut, which raised the water so that it floated off what was left cut and went over the tops of the standing grass, and you could have gone all over the meadows in a boat, and he saw there on the meadows such an immense swarm of sea-birds of various kinds — peeps, plover, yellow-legs, etc. — as he never saw before nor since. He thinks he saw so many in one flock as could not have been packed into his kitchen. He had never seen anything at all like it but once since, and that was the day after he had been to a muster with his company at Waltham — when he was a young man — and had saved the greater part of his allowance of powder on the field. The next day, after getting home, the yellow-legs were so thick on the Mill Brook meadows that he killed a bushel of them.

I saw the tortoises shedding their scales a week ago. Many of the scales two-thirds off, turned up all around.

Aug. 11. A. M. — Up Assabet to stone bridge.

This river is so shallow that you can easily push up it with a paddle, but the other is commonly too deep for this.

As I paddle up this stream this forenoon, the river gently rising as usual in the forenoon (in consequence of raising the gates of the various mill-ponds on and near to it, which had been shut in the night), I meet with many a clam which comes floating down in mid-stream, nicely poised on the water with its pearly concave side uppermost. These have been opened and left by the musquash during the night on the shore, or often on rocks in the stream, and now the water rising gently sets them afloat, as with care you can float an iron pot. But soon a stronger wind or eddy will cause the water to break over them and they will at once sink to the bottom. Last night it lay half buried in mud and sand at the bottom. The musquash has devoured its tenant, and now it floats seaward, a pearly skiff set afloat by the industrious millers. I met with as many as a dozen of them coming down the stream this forenoon,  the valves at an angle of 45° [*sic*], sometimes a single valve, but the least touch of my oars would sink them.

The musquash are eating clams quite fast there. Those lately opened are generally quite small. Is it because of the season or the stream? When I raked the river the other day, all the clams I caught had closed their shells on the teeth of the rake which entered them, just as they catch sea clams with a pointed stick.

Those singular eggs which I saw at the Falls of Concord River in July (*vide* August 8) are far more numerous at the Assabet stone bridge, and many are hatched. They are sprinkled all over the stones of the arch just within it on the sides, and overhead, but extending only [a] few feet under the bridge on either side.

Aug. 14. P. M. — To Barrett's Bar.

The zizania now makes quite a show along the river, overtopping the withered heads of the early canary grass.

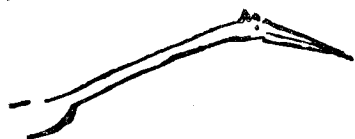
When I reached the upper end of this weedy bar, at about 3 P. M., this warm day, I noticed some light-colored object in mid-river, near the other end of the bar. At first I thought of some large stake or board standing amid the weeds there, then of a fisherman in a brown holland sack, referring him to the shore beyond. Supposing it the last, I floated nearer and nearer till I saw plainly enough the motions of the person, whoever it was, and that it was no stake. Looking through my glass thirty or forty rods off, I thought certainly that I saw C., who had just bathed, making signals to me with his towel, for I referred the object to the shore twenty rods further. I saw his motions as he wiped himself, — the movements of his elbows and his towel. Then I saw that the person was nearer and therefore smaller, that it stood on the sand-bar in mid-stream in shallow water and must be some maiden [in] a bathing-dress, — for it was the color of brown holland web, — and a very peculiar kind of dress it seemed. But about this time I discovered with my naked eye that it

was a blue heron standing in very shallow water amid the weeds of the bar and pluming itself. I had not noticed its legs at all, and its head, neck, and wings, being constantly moving, I had mistaken for arms, elbows, and towel of a bather, and when it stood stiller its shapely body looked like a peculiar bathing-dress. I floated to within twenty-five rods and watched it at my leisure. Standing on the shallowest part of the bar at that end, it was busily dressing its feathers, passing its bill like a comb down its feathers from base to tip. From its form and color, as well as size, it was singularly distinct. Its great spear-shaped head and bill was very conspicuous, though least so when turned toward me (whom it was eying from time to time). It coils its neck away upon its back or breast as a sailor might a rope, but occasionally stretches itself to its full height, as tall as a man, and looks around and at me. Growing shy, it begins to wade off, until its body is partly immersed amid the weeds, — potamogetons, — and then it looks more like a goose. The neck is continually varying in length, as it is doubled up or stretched out, and the legs also, as it wades in deeper or shallower water.

Suddenly comes a second, flying low, and alights on the bar yet nearer to me, almost high and dry. Then I hear a note from them, perhaps of warning, — a short, coarse, frog-like purring or eructating sound. You might easily mistake it for a frog. I heard it half a dozen times. It was not very loud. Anything but musical. The last proceeds to plume himself, looking warily at me from time to time, while the other continues to edge off through the weeds. Now and then the latter

holds its neck as if it were ready to strike its prey, — stretched forward over the water, — but I saw no stroke. The arch may be lengthened or shortened, single or double, but the great spear-shaped bill and head are ever the same. A great hammer or pick, prepared to transfix fish, frog, or bird. At last, the water becoming too deep for wading, this one takes easily to wing — though up to his body in water — and flies a few rods to the shore. It rather flies, then, than swims. It was evidently scared. These were probably birds of this season. I saw some distinct ferruginous on the angle of the wing. There they stood in the midst of the open river, on this shallow and weedy bar in the sun, the leisurely sentries, lazily pluming themselves, as if the day were too long for them. They gave a new character to the stream. Adjutant they were to my idea of the river, these two winged men.


You have not seen our weedy river, you do not know the significance of its weedy bars, until you have seen the blue heron wading and pluming itself on it. I see that it was made for these shallows, and they for it. Now the heron is gone from the weedy shoal, the scene appears incomplete. Of course, the heron has sounded the depth of the water on every bar of the river that is fordable to it. The water there is not so many feet deep,



but so many heron's tibiae. Instead of a foot rule you should use a heron's leg for a measure. If you would know the depth of the water on these few shoalest places of Musketaquid, ask the blue heron that wades and fishes there. In some places a heron can wade across.

How long we may have gazed on a particular scenery and think that we have seen and known it, when, at length, some bird or quadruped comes and takes possession of it before our eyes, and imparts to it a wholly new character. The heron uses these shallows as I cannot. I give them up to him.

By a gauge set in the river I can tell about what time the millers on the stream and its tributaries go to work in the morning and leave off at night, and also can distinguish the Sundays, since it is the day on which the river does not rise, but falls. If I had lost the day of the week, I could recover it by a careful examination of the river. It lies by in the various mill-ponds on Sunday and keeps the Sabbath. What its *persuasion* is, is another question.

In 1677 the town's "brandmarke" as fixed by the State was .

David Heard says that the cattle liked the pipes so well that they distinguished their rustle from that of other grass as he was bringing them to them, and were eager to get them. The cattle distinguished the peculiar rustle of the pipes in the meadow-hay which was being brought to them, and were eager to get them.

Aug. 17. Wednesday. Frost in low ground this morning.

That was purple grass which I saw to-day. I see also the saw-grass in the shorn fields.

Aug. 18. *Thursday*. Half the leaves of some cherries in dry places are quite orange now and ready to fall.

Aug. 21. *Sunday*. P. M. — Walk over the Great Meadows and observe how dry they are. There is quite a drought, and I can walk almost anywhere over these meadows without wetting my feet. It is much drier than it was three weeks ago there. It is like the summer of '54. Almost all the grass has been cut and carried off. It is quite dry crossing the neck of the Holt. In many holes in the meadow, made by the ice, the water having dried up, I see many small fishes — pouts and pickerel and bream — left dead and dying. In one place there were fifty or one hundred pouts from four to five inches long with a few breams, all dead and dry. It is remarkable that these fishes have not all been devoured by birds or quadrupeds. The blue herons must find it easy to get their living now. Are they not more common on our river such years as this?

In holes where the water has just evaporated, leaving the mud moist, I see a hundred little holes near together, with occasionally an indistinct track of a bird between. Measuring these holes, I find them to be some two inches deep, or about the length of a snipe's bill, and doubtless they were made by them. I start one snipe.

People now (at this low stage of water) dig mud for

their compost-heaps, deepen wells, build bank walls, perchance, along the river, and in some places make bathing-places by raking away the weeds. Many are ditching.

Aug. 22. *Monday*. The circles of the blue vervain flowers, now risen near to the top, show how far advanced the season is.

The savory-leaved aster (*Diplopappus linariifolius*) out; how long? Saw the *Aster corymbosus* on the 19th.

Have seen where squirrels have eaten, *i. e.* stripped, many white pine cones, for a week past, though quite green.

That young pitch pine whose buds the crossbills (?) plucked has put out shoots close by them, but they are rather feeble and late.

Riding to the factory, I see the leaves of corn, planted thick for fodder, so rolled by the drought that I mistook one row in grass for some kind of rush or else reed, small and terete.

At the factory, where they were at work on the dam, they showed large and peculiar insects which they were digging up amid the gravel and water of the dam, nearly two inches long and half an inch wide, with six legs, two large shield-like plates on the forward part of the body, — under which they apparently worked their way through wet sand, — and two large claws, somewhat lobster-like, forward. The abdomen long, of many rings, and fringed with a kind of bristles on each side.

The other day, as I was going by Messer's, I was

struck with the pure whiteness of a tall and slender buttonwood before his house. The southwest side of it for some fifty or more feet upward, as far as the outer bark had recently scaled off, was as white, as distinct and bright a white, as if it had been painted, and when I put my finger on it, a white matter, like paint not quite dry, came off copiously, so that I even suspected it was paint. When I scaled off a piece of bark, the freshly exposed surface was brown. This white matter had a strong fungus-like scent, and this color is apparently acquired after a little exposure to the air. Nearly half the tree was thus uninterruptedly white as if it had been rounded and planed and then painted. No birch presents so uniformly white a surface.

It is very dry now, but I perceive that the great star-shaped leaves of the castor bean plants in Mr. Rice's garden at twilight are quite cold to the touch, and quite shining and wet with moisture wherever I touch them. Many leaves of other plants, as cucumbers, feel quite dry.

Aug. 23. P. M. — To Laurel Glen to see the effect of the frost of the 17th (and perhaps 18th).

As for autumnal tints, the *Smilacina racemosa* is yellowed, spotted brown in streaks, and half withered; also two-leaved Solomon's-seal is partly yellowed and withered. Birches have been much yellowed for some time; also young wild cherry and hazel, and some horse-chestnuts and larches on the street. The scarlet lower leaves of the choke-berry and some brakes are the handsomest autumnal tints which I see to-day.

At Laurel Glen, these plants were touched by frost, in the lowest places, *viz.*, the very small white oaks and hickories; dogsbane very generally; ferns generally, — especially *Aspidium Thelypteris* (?), the revolute one at bottom of hollow, — including some brakes; some little chinquapin oaks and chestnuts; some small thorns and blueberry (*Vaccinium vacillans* shoots); aspen, large and tender leaves and shoots; even red maple; many hazel shoots; geraniums; indigo-weed; lespedeza (the many-headed) and desmodium (one of the erect ones); a very little of the lowest locust leaves. These were very small plants and low, and commonly the most recent and tender growth. The bitten part, often the whole, was dry and shrivelled brown or darker. In the river meadows the blue-eyed grass was very generally cut off and is now conspicuously black, — I find but one in bloom, — also small flowering ferns. The cranberries (not vines) are extensively frost-bitten and spoiled.

In Moore's Swamp the potatoes were extensively killed, the greenest or tenderest vines. One says that the driest part suffered the most. They had not nearly got ripe. One man had his squash vines killed.¹

Aug. 24. P. M. — To Conantum.

The small sempervirens blackberry in prime in one

¹ At frosty hollows by Ripple Lake on the 28th, see the effects of the same frost of 17th, — little chinquapin oaklets and the tenderest shoots of *Cornus alba*, the gray dead twigs of the cornel of past years, all their tops; and these two are almost the only shrubs at the bottom. The older cornel leaves have been turned to dark purple, plainly by the frost. *Erechthites* not touched even Aug. 30th (*vide* Sept. 2d).

place. *Aster puniceus* and *Diplopappus umbellatus*, how long? *Calamagrostis coarctata* not quite, end of Hubbard's meadow wood-path. *Panicum virgatum*, say two or three weeks. *Leersia*, or cut-grass, some time, roadside, Corner road, by brook.

Aug. 25. Copious rain at last, in the night and during the day.

A. M. — Mountain-ash berries partly turned. Again sec, I think, purple finch eating them.

I see, after the rain, when the leaves are rustling and glistening in the cooler breeze and clear air, quite a flock of (apparently) *Fringilla socialis* in the garden.

Aug. 26. The dust is laid, the streets washed, the leaves — the first ripe crop — fallen, owing to yesterday's copious rain. It is clearer weather, and the creak of the crickets is more distinct, just as the air is clearer.

The trees look greener and fresher, not only because their leaves are washed and erected, but because they have for the most part shed their yellow and sere leaves.

The front-rank polygonum is now perhaps in its prime. Where it forms an island in the river it is surmounted in the middle or highest part by the *P. hydropiperoides*.

P. M. — To Fair Haven Hill.

Elder-berries have fairly begun to be ripe, as also the *Cornus sericea* berries, and the dull-reddish leaves of the last begin to be conspicuous.

The creak of the mole cricket has a very *afternoon* sound.

Potato vines are generally browning and rank. Roman wormwood prevails over them; also erechthites, in new and boggy ground, and butterweed. These lusty natives prevail in spite of the weeding hoe, and take possession of the field at last. Potato vines have taken a veil of wormwood. The barn-yard grass and various *panics* (*sanguinale*, *capillare*, and bottle-grass) now come forward with a rush and take possession of the cultivated fields, partly abandoned for the present by the farmer and gardener.

How singular that the *Polygonum aviculare* should grow so commonly and densely about back doors where the earth is trodden, bordering on paths! Hence properly called door-grass. I am not aware that it prevails in any other places.

The pontederia leaves are already slightly imbrowned, though the flowers are still abundant.

The river is a little cooled by yesterday's rain, and considerable heart-leaf (the leaves mainly) is washed up.

I begin to think of a thicker coat and appreciate the warmth of the sun. I see sun-sparkles on the river, such as I have not seen for a long time. At any rate, they surprise me. There may be cool veins in the air now, any day.

Now for dangle-berries. Also *Viburnum nudum* fruit has begun.

I saw a cherry-bird peck from the middle of its upright (vertical) web on a bush one of those large

(I think yellow-marked) spiders within a rod of me. It dropped to the ground, and then the bird picked it up. It left a hole or rent in the middle of the web. The spider cunningly spreads his net for feeblers insects, and then takes up his post in the centre, but perchance a passing bird picks him from his conspicuous station.

I perceived for the first time, this afternoon, in one place, a slight mouldy scent. There are very few fungi in a dry summer like this.

The *Uvularia sessilifolia* is for the most part turned yellow, with large green fruit, or even withered and brown. Some medeola is quite withered. Perhaps they are somewhat frost-bitten.

I see a goldfinch eating the seeds of the coarse barn-yard grass, perched on it. It then goes off with a cool twitter.

Notice arrowhead leaves very curiously eaten by some insect. They are dotted all over in lines with small roundish white scales, — which your nail will remove, and then a scar is seen beneath, — as if some juice had exuded from each puncture and then hardened.

The first fall rain is a memorable occasion, when the river is raised and cooled, and the first crop of sere and yellow leaves falls. The air is cleared; the dog-days are over; sun-sparkles are seen on water; crickets sound more distinct; saw-grass reveals its spikes in the shorn fields; sparrows and bobolinks fly in flocks more and more. Farmers feel encouraged about their late potatoes and corn. Mill-wheels that have rested for want of water begin to revolve again. Meadow-haying is over.

The first significant event (for a long time) was the frost of the 17th. That was the beginning of winter, the first summons to summer. Some of her forces succumbed to it. The second event was the rain of yesterday.

My neighbor told me yesterday that about four inches of rain had fallen, for he sent his man for a pail that was left in the garden during the rain, and there was about four inches depth of water in it. I inquired if the pail had upright sides. "No," he said, "it was flaring !!" However, according to another, there was full four inches in a tub.

Leersia or cut-grass in prime at Potter's holes.

That first frost on the 17th was the first stroke of winter aiming at the scalp of summer. Like a stealthy and insidious aboriginal enemy, it made its assault just before daylight in some deep and far-away hollow and then silently withdrew. Few have seen the drooping plants, but the news of this stroke circulates rapidly through the village. Men communicate it with a tone of warning. The foe is gone by sunrise, but some fearful neighbors who have visited their potato and cranberry patches report this stroke. The implacable and irresistible foe to all this tender greenness is not far off, nor can we be sure, any month in the year, that some scout from his low camp may not strike down the tenderest of the children of summer. The earliest and latest frosts are not distinguishable. This foe will go on steadily increasing in strength and boldness, till his white camps will be pitched over all the fields, and we shall be compelled to take refuge in our strongholds,

with some of summer's withered spoils stored up in barns, maintaining ourselves and our herds on the seeds and roots and withered grass which we have *embarned*. Men in anticipation of this time have been busily collecting and curing the green blades all the country over, while they have still some nutriment in them. Cattle and horses have been dragging homeward their winter's food.

A new plant, apparently *Lycopodium inundatum*, Hubbard's meadow-side, Drosera Flat, not out.

Aug. 27. A little more rain last night.

What were those insects, some winged, with short backs and say half an inch long, others wingless and shorter, like little coils of brass wire (so marked), in dense droves together on trees and fences, — apparently harmless, — especially a week or ten days ago?

I was telling Jonas Potter of my lameness yesterday, whereat he says that he "broke" both his feet when he was young, — I imagined how they looked through his wrinkled cowhides, — and he did not get over it for four years, nay, even now he sometimes felt pains in them before a storm.

All our life, *i. e.* the living part of it, is a persistent dreaming awake. The boy does not camp in his father's yard. That would not be adventurous enough, there are too many sights and sounds to disturb the illusion; so he marches off twenty or thirty miles and there pitches his tent, where stranger inhabitants are tamely sleeping in their beds just like his father at home, and camps in *their* yard, perchance. But then he

dreams uninterruptedly that he is anywhere but where he is.

I often see yarrow with a delicate pink tint, very distinct from the common pure-white ones.

What is often called poverty, but which is a simpler and truer relation to nature, gives a peculiar relish to life, just as to be kept short gives us an appetite for food.

Vilfa vaginæflora (?) well out.

The first notice I have that grapes are ripening is by the rich scent at evening from my own native vine against the house, when I go to the pump, though I thought there were none on it.

The children have done bringing huckleberries to sell for nearly a week. They are suspected to have berries [*sic*] in them.

On the 23d I gathered perfectly fresh and large low blackberries, peculiarly sweet and soft, in the shade of the pines at Thrush Alley, long after they are done in open fields. They seem like a different variety from the common, they are so much sweeter, tenderer, and larger. They do not grow densely but sparingly, now resting on the ground in the shade of their leaves, perfectly ripe. These that have ripened slowly and perfectly in the shade are the sweetest and tenderest, have the least of the *bramble* berry about them.

Elder-berry clusters swell and become heavy and therefore droop, bending the bushes down, just in proportion as they ripen. Hence you see the green cymes perfectly erect, the half-ripe drooping, and the perfectly ripe hanging straight down on the same bush.

I think that some summer squashes had turned yellow in our yard a fortnight or more ago.

There are various ways in which you can tell if a watermelon is ripe. If you have had your eye on the patch much from the first, and so know which formed first, you may presume that these will ripen soonest; or else you may incline to those which lie nearest the centre of the hill or root, as the oldest. Next the dull dead color and want of bloom are as good signs as any. Some look green and livid and have a very fog or mildew of bloom on them, like a fungus. These are as green as a leek through and through, and you'll find yourself in a pickle if you open one. Others have a dead dark greenness, the circulations being less rapid in their cuticles and their blooming period passed, and these you may safely bet on. If the vine is quite green and lively, the death of the quirl at the root of the stem is almost a sure sign. For fear we should not discover it before, this is placed for a sign that there is redness and ripeness (if not mealiness) within. Of two otherwise similar, take that which yields the lowest tone when struck with your knuckles, *i. e.*, which is hollowest. The old or ripe ones sing base; the young, tenor or falsetto. Some use the violent method of pressing to hear if they crack within, but this is not to be allowed. Above all no tapping on the vine is to be tolerated, suggestive of a greediness which defeats its own purpose. It is very childish. One man told me that he could n't raise melons because his children would cut them all up. I thought that he convicted himself out of his own mouth, and was not fit to be the ruler of a country according to Confucius'

standard, that at any rate he could not raise children in the way they should go. I once saw one of his boys astride of my earliest watermelon, which grew near a broken paling, and brandishing a case-knife over it, but I instantly blowed him off with my voice from a neighboring window before serious damage was done, and made such an ado about [it] as convinced him that he was not in his father's dominions, at any rate. This melon, though it lost some of its bloom then, grew to be a remarkably large and sweet one, though it bore to the last a triangular scar of the tap which the thief had designed on it.

I served my apprenticeship and have since done considerable journey-work in the huckleberry-field, though I never paid for my schooling and clothing in that way. It was itself some of the best schooling I got, and paid for itself. Occasionally in still summer forenoons, when perhaps a mantua-maker was to be dined, and a huckleberry pudding had been decided on, I, a lad of ten, was dispatched to the huckleberry hills, all alone. My scholastic education could be thus far tampered with and an excuse might be found. No matter how few and scarce the berries on the near hills, the exact number necessary for a huckleberry pudding could surely be collected by 11 o'clock. My rule in such cases was never to eat one till my dish was full. At other times when I had companions, some used to bring such curiously shaped dishes that I was often curious to see how the berries disposed of themselves in them. Some brought a coffee-pot to the huckleberry-field, and such a vessel possessed this advantage at least,

that if a greedy boy had skimmed off a handful or two on his way home, he had only to close the lid and give his vessel a shake to have it full again. This was done all round when we got as far homeward as the Dutch house. This can probably be done with any vessel that has much side to it.

I once met with a whole family — father and mother and children — ravaging a huckleberry-field in this wise: they cut up the bushes, and, as they went, beat them over the edge of a bushel basket, till they had it full of berries, ripe and green, leaves, sticks, etc., and so they passed along out of my sight like wild men.

See *Veratrum viride* completely withered and brown from top to bottom, probably as early as skunk-cabbage.

Aug. 28. P. M. — To Walden.

A cool day; wind northwest. Need a half-thick coat. Thus gradually we withdraw into winter quarters. It is a clear, flashing air, and the shorn fields now look bright and yellowish and cool, tinkled and twittered over by bobolinks, goldfinches, sparrows, etc. You feel the less inclined to bathing this weather, and bathe from principle, when boys, who bathe for fun, omit it.

Thick fogs these mornings. We have had little or no dog-days this year, it has been so dry.

Pumpkins begin to be yellow. White cornel berries mostly fallen.

The arrowhead is still a common flower and an important one. I see some very handsome ones in Cardinal Ditch, whose corollas are an inch and a half in diameter. The greater part, however, have gone to

seed. The flowers I see at present are autumn flowers, such as have risen above the stubble in shorn fields since it was cut, whose tops have commonly been clipped by the scythe or the cow; or the late flowers, as asters and goldenrods, which grow in neglected fields and along ditches and hedgerows.

The rhexia in Ebby Hubbard's field is considerably past prime, and it is its reddish chalice which shows most at a distance now. I should have looked ten days ago. Still it is handsome with its large yellow anthers against clear purple petals. It grows there in large patches with hardhack.

I hear that some of the villagers were aroused from their sleep before light by the groans or bellowings of a bullock which an unskillful butcher was slaughtering at the slaughter-house. What morning or Memnonian music was that to ring through the quiet village? What did that clarion sing of? What a comment on our village life! Song of the dying bullock! But no doubt those who heard it inquired, as usual, of the butcher the next day, "What have you got to-day?" "Sirloin, good beefsteak, rattleran," etc.

I saw a month or more ago where pine-needles which had fallen (old ones) stood erect on low leaves of the forest floor, having stuck in, or passed through, them. They stuck up as a fork which falls from the table. Yet you would not think that they fell with sufficient force.

The fruit of the sweet-gale is yellowing.

Aug. 29. I hear in the street this morning a goldfinch sing part of a sweet strain.

It is so cool a morning that for the first time I move into the entry to sit in the sun. But in this cooler weather I feel as if the fruit of my summer were hardening and maturing a little, acquiring color and flavor like the corn and other fruits in the field. When the very earliest ripe grapes begin to be scented in the cool nights, then, too, the first cooler airs of autumn begin to waft my sweetness on the desert airs of summer. Now, too, poets nib their pens afresh. I scent their first-fruits in the cool evening air of the year. By the coolness the experience of the summer is condensed and matured, whether our fruits be pumpkins or grapes. Man, too, ripens with the grapes and apples.

I find that the water-bugs (*Gyrinus*) keep amid the pads in open spaces along the sides of the river all day, and, at dark only, spread thence all over the river and gyrate rapidly. For food I see them eating or sucking at the wings and bodies of dead devil's-needles which fall on the water, making them too gyrate in a singular manner. If one gets any such food, the others pursue him for it.

There was a remarkable red aurora all over the sky last night.

P. M. — To Easterbrooks Country.

The vermonia is one of the most conspicuous flowers now where it grows, — a very rich color. It is somewhat past its prime; perhaps about with the red cupatorium. *Botrychium lunarioides* now shows its fertile frond above the shorn stubble in low grounds, but not shedding pollen. See the two-leaved Solomon's-seal berries, many of them ripe; also some ripe mitchella

berries, contrasting with their very fresh green leaves. White cohush berries, apparently in prime, and the arum fruit. The now drier and browner (purplish-brown) looking rabbit's clover, whose heads collected would make a soft bed, is an important feature in the landscape; pussies some call them; more puffed up than before. The thorn bushes are most sere and yellowish-brown bushes now.

I see more snakes of late, methinks, both striped and the small green.

The slate-colored spots or eyes — fungi — on several kinds of goldenrods are common now. The knife-shaped fruit of the ash has strewn the paths of late.

Aug. 30. P. M. — Up Assabet.

The river began to fall perhaps yesterday, after rising perhaps fourteen or fifteen inches. It is now about one foot higher than before the rain of the 25th. A rise of one foot only from low water gives an appearance of fullness to the stream, and though the meadows were dry before, it would now be difficult to work on them. The potamogetons, etc., are drowned, and you see a full rippling tide where was a sluggish and weedy stream but four or five days ago. Now, perhaps, will be the end of quite a number of plants which culminate in dry weather when the river is low, as some potamogetons, limnanthemum (in the river), etc. Sparganium and heart-leaf are washed up, and the first driftwood comes down; especially portions of bridges that have been repaired take their way slowly to the sea, if they are not saved by some thrifty boatman. The river is fuller,

with more current; a cooler wind blows; the reddish *Panicum agrostoides* stands cool along the banks; the great yellow flowers of the *Bidens chrysanthemoides* are drowned, and now I do not see to the bottom as I paddle along.

The pasture thistle, though past its prime, is quite common, and almost every flower (*i. e.* thistle), wherever you meet with it, has one or more humblebees on it, clambering over its mass of florets. One such bee which I disturb has much ado before he can rise from the grass and get under weigh, as if he were too heavily laden, and at last he flies but low. Now that flowers are rarer, almost every one of whatever species has bees or butterflies upon it.

Now is the season of rank weeds, as *Polygonum Carey*, tall rough goldenrod, *Ambrosia elatior*, primrose, crechthites (some of this seven feet high), *Bidens frondosa* (also five feet high). The crechthites down has begun to fly.

We start when we think we are handling a worm, and open our hands quickly, and this I think is designed rather for the protection of the worm than of ourselves.

Acorns are not fallen yet. Some haws are ripe.

The plants now decayed and decaying and withering are those early ones which grow in wet or shady places, as hellebore, skunk-cabbage, the two (and perhaps three) smilacinas, uvularias, polygonatum, medecola, *Senecio aureus* (except radical leaves), and many brakes and sarsaparillas, and how is it with trilliums¹ and arums?²

¹ Many fallen, Aug. 19, 1852.

² Trientalis and arums are decayed and decaying.

The prevailing flowers, considering both conspicuousness and numbers, at present time, as I think now:¹ —

Solidagos, especially large three-ribbed, *nemoralis*, tall rough, etc.
Asters, especially *Tradescanti*, *puniceus*, *corymbosus*, *dumosus*,
Diplopappus umbellatus

Tansy

Helianthus, as *Helianthus decapetalus*, *divaricatus*, *annuus*, etc.

Eupatoriums, as *perfoliatum*, *purpureum*

Mikania

Polygonums, as *P. Carey*, *dumetorum*, front-rank, *Persicaria*,
sagittatum, etc.

Gnaphalium, as *polycephalum* and pearly

Bidens, as *frondosa* and *chrysanthemoides*

Gerardias, as *purpurea* and *pediculata*

Hieraciums, as *Canadense*, *scabra*, and *paniculatum*

Vernonia

Polygala sanguinea, etc.

Liatris

Nabalus albus

Mints, as lycopuses, white mint, *pycnanthemums*

Hypericums, the small ones of all kinds

Leontodon autumnalis (prevailing, open in forenoon)

Pontederia

Sagittaria variabilis

Desmodium

Spiranthes cernua

Lespedeza violacea

Cuscuta

Rhexia

Lobelia cardinalis

Cirsium pumilum

Chenopodium

Scutellaria lateriflora

Impatiens

Apios

Linaria vulgaris

Gratiola aurea

¹ Imperfect list.

Aug. 31. P. M. — To Fair Haven Hill.

Was caught in five successive showers, and took refuge in Hayden's barn, under the cliffs, and under a tree. A thunder-cloud, seen from a hilltop, as it is advancing rapidly across the sky on one side, whose rear at least will soon strike us. The dark-blue mass (seen edgewise) with its lighter upper surface and its copious curving rain beneath and behind, like an immense steamer holding its steady way to its port, with tremendous mutterings from time to time, a rush of cooler air, and hurried flight of birds.

These later weeds, — chenopodiums, Roman wormwood, amaranth, etc., — now so rank and prevalent in the cultivated fields which were long since deserted by the hoers, now that the potatoes are for the most part ripened, are preparing a crop for the small birds of the fall and winter, those pensioners on civilization. These weeds require cultivated ground, and Nature perseveres each year till she succeeds in producing a bountiful harvest by their seeds, in spite of our early assiduity. Now that the potatoes are cared for, Nature is preparing a crop of chenopodium and Roman wormwood for the birds.

Now especially the crickets are seen and heard on dry and sandy banks and fields, near their burrows, and some hanging, back down, to the stems of grass, feeding. I entered a dry grassy hollow where the cricket alone seemed to reign, — open like a bowl to the sky.

While I stand under a pine for shelter during the rain, on Fair Haven Hill-side, I see many sarsaparilla plants fallen and withering green, *i. e.* before changing. It is

as if they had a weak hold on the earth, on the subterranean stocks.

The nightshade berries are handsome, not only for their clear red, but the beautifully regular form of their drooping clusters, suggesting a hexagonal arrangement for economy of room.

There was another shower in the night (at 9 P. M.), making the sixth after 1.30 P. M. It was evidently one cloud thus broken into six parts, with some broad intervals of clear sky and fair weather. It would have been convenient for us, if it had been printed on the first cloud, "Five more to come!" Such a shower has a history which has never been written. One would like to know how and where the cloud first gathered, what lands and water it passed over and watered, and where and when it ceased to rain and was finally dissipated.