

Hal & Al's Cedar Lane Nature Trail Notes at Lake Charlevoix

7/20/2020

along the *Bob Sayer Memorial Tonnadoonah Trail* (0.81 mile loop)

ave. summer high temp: 77 F; ave. winter low temp: 20 F; ave. summer lake temp: 66 F

ave. winter snowfall: 123"; 45.3 deg. north latitude

Nature trail note locations:

1) The trail: a strip of forest land along the lane was purchased by Bob McMurtrie in 1979 and converted to the Cedar Lane Conservancy in 1990. Long time Cedar Lane resident Bob Sayer blazed the original loop trail for XC skiing. It is now maintained year round for hiking as well.

2) The enchanted forest: a CCC planted grove of red pines (*Pinus resinosa*) (also known as Norway pines) here in the mid-1930s. Red pine needles are 5-7" long in groups of 2. The CCC (Civilian Conservation Corps) was created by FDR and existed from 1933 – 1942, ending largely with WWII. Also known as "Roosevelt's tree army", the CCC planted over three billion trees, with approximately 485 million of them planted in Michigan forests. If you look up at the tops of the trees, you will often see the trees swaying together gently to and fro in the breeze.

3) Wilson Creek: one of many creeks that drain into Lake Charlevoix, this one has an average summer flow rate of ~50 gallons / minute (measured) which is nearly 5000 cubic feet of water in a day. A small waterfall can be found nearby. ("WF" on map.) (Graydon Wilson owned all the lakefront property encompassing Cedar Lane before development and lived next to the creek.)

4) The crooked tree: a Scotch (or Scots) pine. (*Pinus sylvestris*) Scotch pines will grow from 30 to 70 feet tall, with 2-4" needles in groups of two and usually with a very shaggy, irregular shape. Scotch pines are the most popular tree used for Christmas trees in the U.S.

5) Mixed forest: this entire region is a northern boreal (or snow) forest consisting of largely coniferous (i.e. pine) trees (softwood) and with hardwood (deciduous) trees mixed in including maple, birch and poplar. (There are no (or very few) oak trees in the forest along this trail.)

6) Juniper bushes: there is a wide variety of junipers (*Juniperus*) (up to 67 different species), with trees as tall as 130 feet to low lying shrubs, such as the ones here. Juniper wood is quite similar to cedar in nature, and juniper berries are used to flavor gin.

7) Power lines: Lake Charlevoix was home to a coal-fired power plant in Advance for 44 years. It was built in 1953, and deactivated in 1997. It could generate a peak of 43 megawatts of electricity and was supplied with coal by 600' long Great Lakes freighters. The ships were 60' wide and the canal in Charlevoix is only 100' wide (by 2000' long) so it was a tight squeeze plus there is a 15 deg. angle, so the rudder was needed. It would take ~5 freighter loads of coal (at 10,000 tons each) to keep the plant running for a year. Seeing the freighter was quite a sight! (The canal from Charlevoix to Round Lake was created in 1869 & enabled much area industry.)

8) Eastern white pine: the eastern white pine (*Pinus strobus*) is Michigan's state tree, with soft 4" long needles in bundles of 5. They are the tallest eastern tree and were the biggest trees in the state during the lumber era. Many reportedly stood over 200' tall & 5' in diameter. None have reached that height since. The biggest trees in Hartwick Pines now are just over 150' tall.

9) The clearing: there are a number of pine trees visible including white, red and Scotch pines.

10) Mosses: moss grows well in damp, shady locations. There are over 13,000 varieties. Mosses do not produce seeds, but use spores (like mold) to reproduce. They are low growing and not good for much (peat moss is used for mulch), but they look nice and are soft to walk on.

11) Swamp: Michigan was once considered “a mosquito-infested, godforsaken swamp” and in 1814 it was proclaimed that 90% of Michigan was “unfit for cultivation”, but the wetlands were drained to establish roads and agriculture. Cutting drainage ditches was common in Michigan as it became more densely populated in the 1800’s. Cedar trees grow well in moist, boggy soil, or “cedar swamps” where other trees won’t grow. Wetlands are also great for biodiversity and as well for breeding mosquitoes as you may have noticed around here.

12) Big spruce: (*Picea*) white and black spruce are both native. They have single needles 7/8” long that will roll between your fingers. Some spruce will grow to 200 feet tall. Spruce are often used in paper as they have long fibers. This one (likely a white) is ~70’ tall. (*Picea glauca*)

13) Tamarack: (*Larix laricina*) a larch, they grow from 30 – 60 feet tall and have groups of ~1” needles that come from a nub on the twig. This is a deciduous coniferous tree and loses all its needles every year. Each autumn the needles turn a beautiful golden brown before they drop.

14) Eastern hemlock grove: (*Tsuga Canadensis*) The large tree here is likely close to 200 years old. It’s 9 feet around, 3’ in diameter and ~80’ tall. (There are spruce here also.) Hemlock take 250 to 300 years to reach maturity and may live for 800 years or more and have individual short (~1”) flat needles. This grove may be a virgin stand as they would have been much smaller when the loggers came through and clear-cut northern Michigan 150 years ago in the 1870’s and 1880’s. Old growth white pines were the plums, but eventually they logged most everything until around 1890 when the forests were cleared and the lumber boom in Michigan ended.

15) Birch tree: white and yellow birch are both native to Michigan. This is likely a white (also called paper or canoe) birch. (*Betula papyrifera*) The bark often peels like paper. They often grow to 60 feet but can reach 120 feet tall. Birch is not a long living tree and the roots are very shallow so they can fall in wind. Birch is often one of the first species to colonize a burned area.

16) Cedar trees - Cedar Lane’s namesake! Northern white-cedar (*Thuja occidentalis*) trees are slow growing and they normally top out between 40-60 feet tall but can reach over 100 feet. Western red-cedar of the west coast grow to heights of over 200’ with bases over 10’ in diameter and can live over 1000 yrs. Cedar is valued for being aromatic (cedar chests etc.) and is weather resistant with its resins, making for good exterior siding and decking.

17) Poplar: poplar trees (*Populous*) are similar to aspen and cottonwood. They grow quickly and often reach heights from 50 – 150 feet. Similar to cedar, they are often wetland trees.

18) The leaning tree: is an American basswood (*Tilia Americana*) These trees will grow from 60 to 120 feet tall. The leaves are large, usually 4-6 inches long, but can be up to 10 inches long.

19) Balsam fir: this is the only fir native to Michigan. (*Abies balsamea*) The single ~1” long needles are arranged in a flat pattern on the twigs. They grow to 50 – 60 feet but can reach 90. They are popular Christmas trees for their shape, for being fragrant & retaining their needles.

20) The burn field: this field is used by the residents of Cedar Lane to collect an annual pile of discarded wood from pruning or downing unwanted trees. (There’s no wood shortage around here!) The association’s caretaker waits until January when there is no fire danger, and lights the large pile. It will normally burn for the next 2-3 days.

Hal & Al’s Nature Notes were created by Hal and Alan Wolfe in the autumn of 2018. Ellen and Richard Wolfe (Hal & Al’s parents) were long time (summertime) residents of Lake Charlevoix on Cedar Lane (1967 - 2016) and were avid nature lovers & nature conservation supporters.