

Succession on Agricultural Land 400-1

Property of J. Aronson, Halcott Center 7/6/70

(Fairbairn's Saw Mill, page 6)

Hayfield Succession

MK lost mething of CCD, 8/75

J. Aronson died
Spring 1976 in Rome,
Italy. 11/7/76

A hayfield until 1935, east of house near road, was used for growing forage for sheep & cattle, but was not grazed by the livestock. Red maple, trembling aspen and ash pioneered, but now seedlings & saplings are largely sugar maple and ash with a few red oak and red maple. The overstory trees run about 40 ft x 4".

Toward the south, also on east side of road, escaped apples pioneered, now overtopped by ash. Large patches of Aster macrophyllus here. Much of this lot was sown in 1941, the last time a mower went through cutting several swaths perhaps 20 to 30 ft wide. Today, the swaths are still in a field condition, the trees hardly having invaded partly due to browsing by deer and perhaps draught(?)

Another hayfield is located NW of the cemetery, where the pipeline comes out of the woods from the spring. Lycopodium complanatum, obovatum & clavatum are characteristic, along with Polytrichum commune.

There is no noticeable difference between grazed and hayed lands as regards ground vegetation.

Grazed Land

The slope on the E (or SE) slope of the brook was heavily grazed by sheep and/or cattle until 1935. Land formerly grazed can often be identified by large old trees and many young ones, with intermediate-aged stems absent. Common ground cover today includes

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Recorded ✓ indicates NOT plotted on graph. No ring count.

Recorded ✓ How was age determined? By ring count? →

Tree #9 → recorded ✓

Lycopersicon, *Maianthemum*, *Aster divaricatus*, *Urtica sess.*, *Athyrium* *anrotatum*, *Filix-femina* and *Thelypteroides*, and tons of *Dennstaedtia*. *Lycopersicon complanatum* & *clavatum*, and *Tendium* also common. Trees mostly red maple, sugar maple, ash, red oak, and *Ostrya*. Grass & tree saplings were once abundant and served as grazing food, but now the ferns, largely hay-scented, has taken over. The ferns are not dense enough, however, to shade out ground cover plants beneath them. Some patches of sedge (grass?) and *Lycopodium* are ^{nearby} islands in the ferns. Quaking & big tooth aspen which grow up somehow during the grazing under good conditions can be → 45-50 yrs and 13" DBH (as in Rider Hollow larch plantation); good growth years yield 4 rings to the inch, but in draught years 8 to 10 rings/inch. A 10" Red maple was 65-70 yrs when cut; good years 8 rings/inch and poor years 25/inch. Oak seedlings in the former graze are abundant, but now being browsed by deer; red oak saplings are encouraged by forest management by the removal of saplings of other species. One station for *Gymnocarpium* *drucei* ^{recorded} → 20" oak can be 70 yrs under good conditions. *Habenaria orbiculata* in full flower. Hay-scented fern was 3 ft wide about 1950, NW of house, and has expanded to several hundred feet across since, in this lot, the numerous sugar seedlings come from only a few large seed trees nearby.

Grazed Sugarbush

NW of house on steeper slope of South Mtn. This plot was cut and grazed once but left alone since about 1880. Sugar maples used for tapping were the primary source of sweeteners in the 1800's, not sugar cane. The maples were usually spaced 20 ft or more apart, so that a pair of oxen wagon could pass between them. The sugars are 18" t, with an understory & sapling growth of sugar, *Ostrya* to 4-6" DBH and some YB. Many sugar seedlings. A 4" ash measured

recorded

35 years slow growth. Roots may be perched on a rock and cannot get to water table beneath, when the table is low in late summer.

Woodlot

① The steep slope along the W(NW) brook and floodplain was always forested, never grazed, but used as a woodlot. It was cut, selectively, for different species at different times, beech & apple being used for firewood. Red oak & PB are common seedlings, but the seed source is from a very few mature individuals in the area.

→ PB coppers 30 ft x 4" are only 15 years old. Damage here in the form of broken tops & damaged branches was due to the Nov. 8, 1969 storm of heavy wet snow & wind.

A seepage area along the steep bank is occupied by *Impatiens*. Trees are not getting established in the springy soil perhaps partly because of inadequate root aeration, yet the water does flow slowly even in drought years. Escaped Apple trees occur on the floodplain.

② The upper ^{North (NE?)} slopes of South Mtn, around the spring pipeline source are mesic Beech, Sugar, PB & Moosewood even with *Oxalis* and abundant bryophytes on wet rocks & logs. Moosewood understory is especially abundant. The last time this wooded area was logged was about 1910-1915, then lightly. Since then, some trees have become overmature & immense like a 32" dead PB and a live one near it about 27" or 28". *Comus alternifolia* & Mtn Maple at the 32" PB near the spring.

400-4

The NW slope of the ridge, beyond the spring (not visited) above Halcott Center Mr. Aronson reports to now hemlock and always was. The southeast slope with no hemlock today, probably never had any. Hemlock wood was used for framing (house construction) in the 1890's and later, well after the tanning era.

Conifer Plantation

A former pastured field (until 1935?) was planted in 1955 or 56 with Norway spruce, Red, White & Jack Pine. Aspens, moving in naturally at about the same time, are now taller than the conifers, and these conifers in the aspen shade are suffering. The 11/8/69 storm hit the red pine hardest by breakage & blowdown. Conifers are more subject to breakage by snow weight because they are in full leaf in winter.

Drought

A drought occurred in August 1939, and then a long one starting about 1960 or 1961 & culminating in 1965. Growth rings are smaller during these periods. South slopes are harder hit in dry years than north slopes. Sunscald occurs on SW side of trees in spring & fall after sunset when frost sets in shortly after last warm sun rays depart. Sunscald normally will not kill the tree, but leaves scars on the SW side of the bole.

State Takeover of Land

Land owners remove as much timber and firewood as possible from their land before the State takes over. The west spur and

Summit of Halcott Mtn. was taken over by the State in 1934. Halcott Mtn. was never logged commercially, but it was cut at times for firewood. Grazing sheep & cattle were left to roam the slopes, and could have grazed the summit if climbable to them.

Miscellaneous

Partridge (grouse) nest on the ground, clearing a circular depression several inches deep and 24" across. These nest sites can remain for several years after abandonment.

Cankers rot various levels on a tree stem, often where a dead branch breaks off and opens the bark. These canker zones are weak and may be the most likely locations of wind breakage.

Other Peaks

Bearpen & Vly may be virgin, although Halcott was cut (selectively?) for firewood and perhaps grazed.

The Pisgah-Murphyfield range in Greene County was all old grazeland, even cleared, and since reforested - both naturally & by plantations.

Landslide ~~Avalanche~~ scar on E slope of Balsam Mtn should be checked, for trees look younger & smaller in vertical strips descending to Big Indian Hollow.

400-b

Notes from Howard Fairbairn, Sawmill, Margaretville

Today, mainly ^{best} sugar maple is cut down to 14" for furniture (^{best} quality) veneer. It is shipped to the Conlins where the furniture factories are. Lower grade sugar maple is used for packing crates.

Ash is still cut for baseball bats, down to 8", as at Allaben.

No timber is cut in the Forest Preserve, but State Land is managed & some trees cut outside the Preserve.

Logging in the Catskills can go to 3000 ft and over if the conditions (soils, etc) permit useable trees (not stunted). Modern equipment can work the high slopes. Destruction of vegetation around the cut trees depends on the terrain, the logger & his equipment.

Source:

The Ball Hooplers (195?)

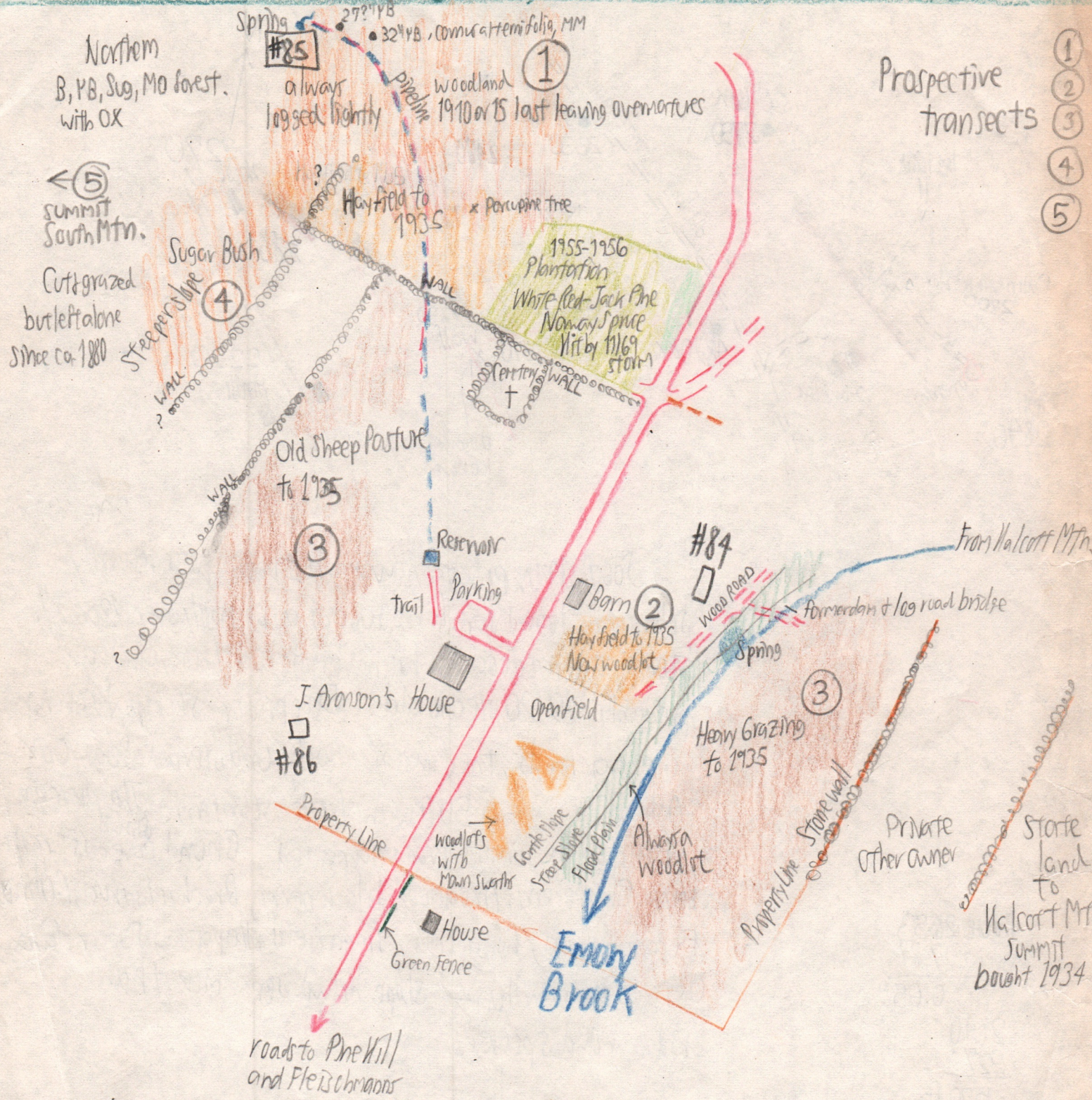
Howard P. (A.?) Kanton

Timber history of NY, PA, VA, author from Cortland Kanton Lumber Co. of Cayuta, NY.

7/6/70
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Joseph Aronson's Land and Transect Locations

Halcott Center, N.Y.



- Prospective transects
- 1
 - 2
 - 3
 - 4
 - 5