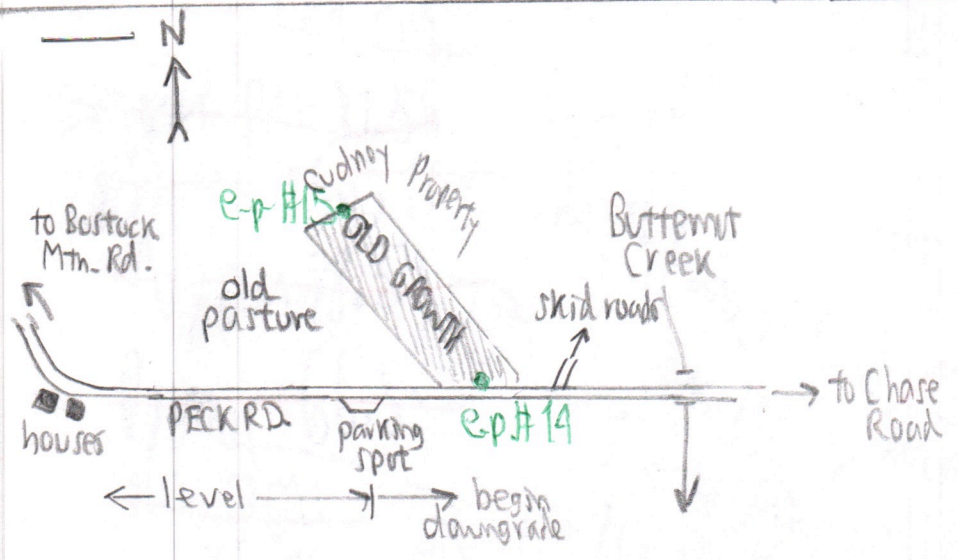


OLD GROWTH OAK WOODS, SHOKAN NOT FIRST GROWTH



This woodlot must have been within the millennia-old Escopus people burn region. Europeans cleared & pastured it between 1750 & 1800, and must have abandoned it ca-1850. The oaks are about 150 years, seedling in on the old pasture. E. hemlock might have come in later under the oaks & are now ± 100 to 130 y. The unusual feature is the **EARLY** abandonment.

Trees

<u>N-red oak</u>	circumference	diam.
	93.5"	30"
	96"	31"
	104"	33"
	99" ⊙	32"
	85 1/4"	27"
	115" *	37"
<u>White oak</u>		
	86"	27"
	81.5"	26"
<u>Black gum</u>		
	98.5"	31"
	73"	23"
<u>Pignut</u>		
	66.5"	21"
<u>E. hemlock</u>		
	70"	22"
	most in	15 to 15" range
<u>Red maple</u>		
<u>Chestnut oak</u>		
	53.5"	17"
<u>Black birch</u>		
		10"
<u>White ash</u>		
		13"

Reproduction
SUGAR maple
Striped maple
Hop hornbeam

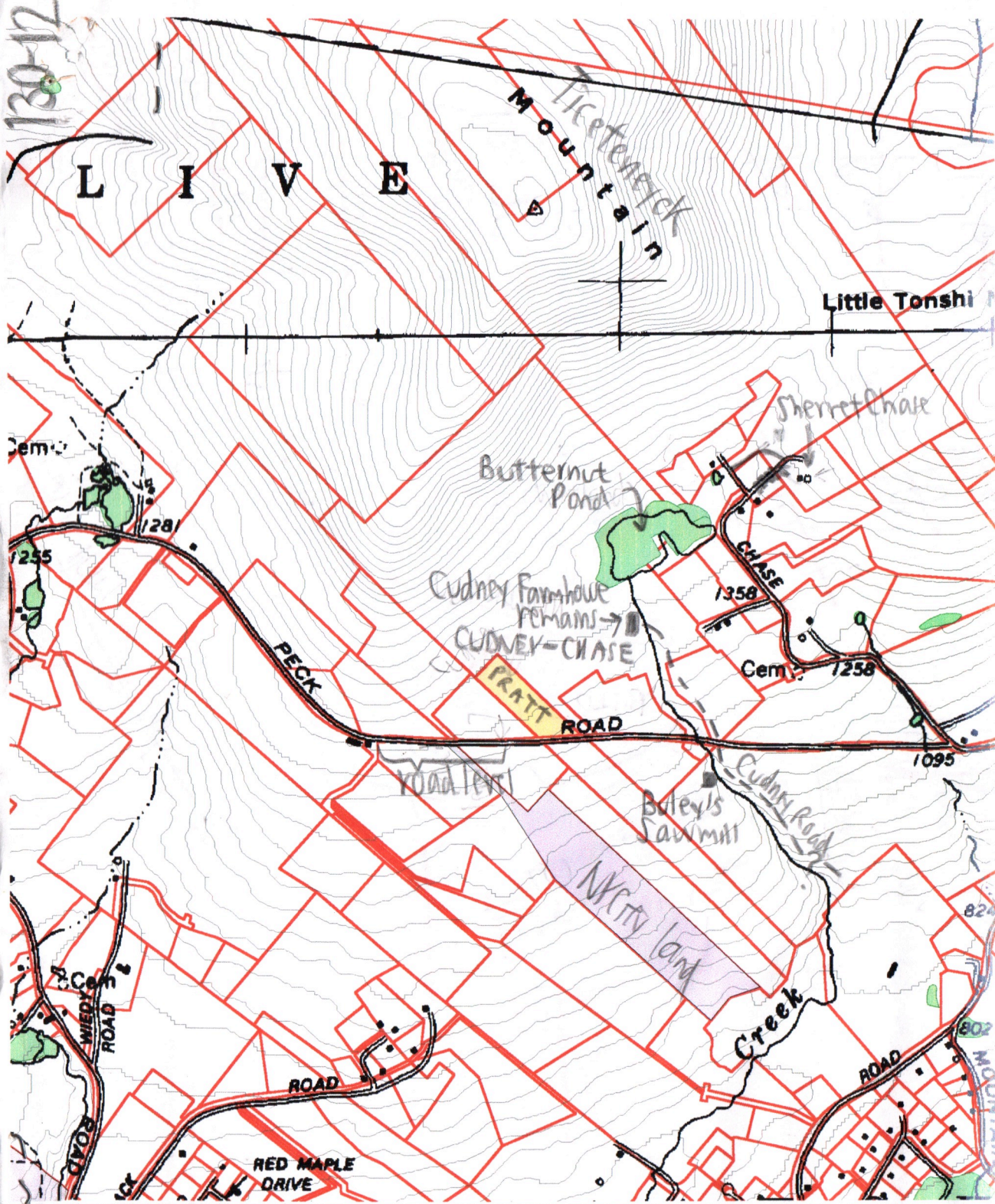
N-red oak growth rates range from 5 to 20 yr avg per radial inch. A 30" DBH = 15" radius tree varies from age 5x15=75 to 20x15=300 unlikely! Mean is 10x15=150 years

Stumps, N red oak, on property to west:

- 18" diameter, 95 years
- 24" diameter, 110 years
- 26" diameter, fallen down & broken, off 25ft up, only ^{outer} portion of trunk countable, 15 to 20 rings/inch. At 15 rings/inch & 13 inch radius, age is ± 195 years.

88 rings visible ⊙ down naturally with 5 to 15 rings/inch, broken, mean 10 rings/inch x ?? radius = years
* with 5 main buttressed roots (phyllotaxy?)

Property on E must have been logged the year before or maybe currently
E white pine on property to west: a bunch saplings on semi-open stand.
Polygala pauciflora in flower along road, N side.



Butternut Pond is on
 a terrae with till
 130 ft deep. 5/2/01

Chris Olney's
 handwriting { Turn on Mountain Rd
 (off Rt 28 at the
 Blueberry Patch)

130-12

George W.

Pratt Lot Old Growth Shokan

6/11/01 with Dr. Sherret L. Hare
[revisited, Originally with Dr. Sam Adams 5/12/01]

130-13

130-13

Northern red oaks on Cudney Lot
Surrounding the Pratt Lot, owned
by Chase Family & cut in 2000:

- Tree ① 28" diam. at base, 80 years, SW of Butternut Pond
- ② 24" " " " , 87 years
- ③ 29" " " " , 90 years
- ④ 32" " " " , 103 years, SE side of Pratt Lot

Mean diameter 28 1/4"
 mean radius 14"
 mean age 90y
Mean growth rate 6.43
 Rings / Inch of radius

$$\frac{90y}{14"} = \frac{?y}{1"} : \frac{90}{14} = 6.43$$

Bigtooth blawdown.
 Kalmia. aln.
 Vacc. pallidum

Shagbark
 Lyonia
 Ilex vert along
 Butternut Brook

Northern red oaks within the Pratt Lot:

Tree ⑩① 123" circum along E bandway, near N corner. 39" DBH
NO age estimate.

Tree ⑩② Buttressed 5-root observed also on 5/12/01 120" CIRCUM. = 38" DBH
^{standing}

Tree ⑩③ Tree came down in a storm, probably already dead ^{some} years,
lying on ground (see sketch map). E. white pine saplings 10 to 12 years
old have grown up alongside it. The oak must have died at least 20 years
ago. Bark fragments on the ground under the barkless trunk. Only
trunk & several main limbs remain — no branches.

Circumference 87", diameter 28", radius 14".

A. Base of trunk, broken wood, outermost 2" of radius = 30 years. ^{radius}
mean growth rate: 15 rings / inch

B. Core taken with increment borer in horizontal trunk maybe
10 ft from base. Outer wood rotted.

5" long core shows 58 \rightarrow years.
mean growth rate: 12 / inch.

C. Main branch, maybe ^{once} 20 to 30 feet above ground, 11" diameter
5 1/2" radius, broken, rings countable 11y. Mean growth rate: 20 / inch
(over)

(Continued). Outermost ^{youngest} inch of the 11" diameter branch = 30 rings / radial inch
 Innermost _{oldest} " " " " " " " " 20 rings / radial inch

130-14

For the ^{slowest} years, the ^{growth} increment consists of one band of vessels plus the summerwood. The spring (early) wood is reduced to a band of vessels.

Tree (108) age estimate, 14-inch radius.

- At fastest rate, 12 rings / inch : $12 \times 14 = 168$ y
- At slowest rate, 30 rings / inch : $30 \times 14 = 420$ y
- At average rate, 15 rings / inch : $15 \times 14 = 210$ y
- " " " 20 rings / inch : $20 \times 14 = 280$ y

$\frac{2107814}{14} = 270$ y best estimate.

If died in 1970, then estab in 1700.

If tree is 270y, why did it require 270-111 = 159 y for trunk to be tall enough to produce the branch studied?

Tree (104) 30 rings / radial inch, but no diameter recorded [probably 24 to 36"]
 Also down on ground & near Tree (103).

Met at
 CECO
 Annual
 Meeting
 in 2011 or 2012

- History:
- A. 1973 Steve Cope was ^{the} ministry student making pancakes. Now in N New England.
 - B. Alva Buley's sawmill site is on W bank of Butternut Creek about 60 to 80 ft. in elev. below Peck Rd. Several stone walls remain. Running in 1896 ±. Nred, chestnut & white oaks, BB, several Pignut, Am. chestnut sprouts -- all old fields.
 - C. John Cudney's deed is dated 1830 to his farm. He was the sole owner of the farm for ± 50 or 60 years. Fields ^{were} abandoned, later sold to Chase Family in 1920. Sherret remembers the ^{ca. 1931} woods as open ^{as a boy (born 1918)}. The east side of Chase Road was owned by Winchells in 1920 when sold to Chases. Stone walls & ^{old} pastures up to base of steep Tice Teneyck slope.
 - D. The old growth woodlot belonged to George W. Pratt, probably son of Zadock Pratt, 6 acres.
 - E. We have NO idea of the age of the other tree species.

130-14