

SOME FOREST HEALTH IMPACTS

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- Beech-bark disease
- Understory Species Changes
- Growth Impacts
- Elevational Change

Beech Bark Disease

- 1939: discovered at Bartlett
- 1952-56: 85-93% heavy scale and Nectria
- 2004: Three stands examined:
 - Old Managed (cut 1952,1975,1992)
 - Old Unmanaged (cut 1952-53)
 - Young (some thinning of non-beech)

2004: Percent of Beech BA

	<u>Clean</u>	<u>Rough</u>	<u>Nectria</u>
• Managed	15	58	27
• Unmanaged	4	29	67
• Young	1	64	35

Basal Area (sq.ft.) In Beech (app.)

•	1952	2004
• Managed	41	49
• Unmanaged	26	45
• Young	19	30

Saplings/A:Stands Cut Once (79 plots)

•	Be	Sm	Hem	StrM
• 1931-32	134	28	32	8
• 1991-92	142	15	77	31

Saplings/A: Stands Cut Twice (20 plots)

•	Be	Sm	Hem	StrM
• 1931-32	103	27	41	8
• 1991-92	102	22	57	30

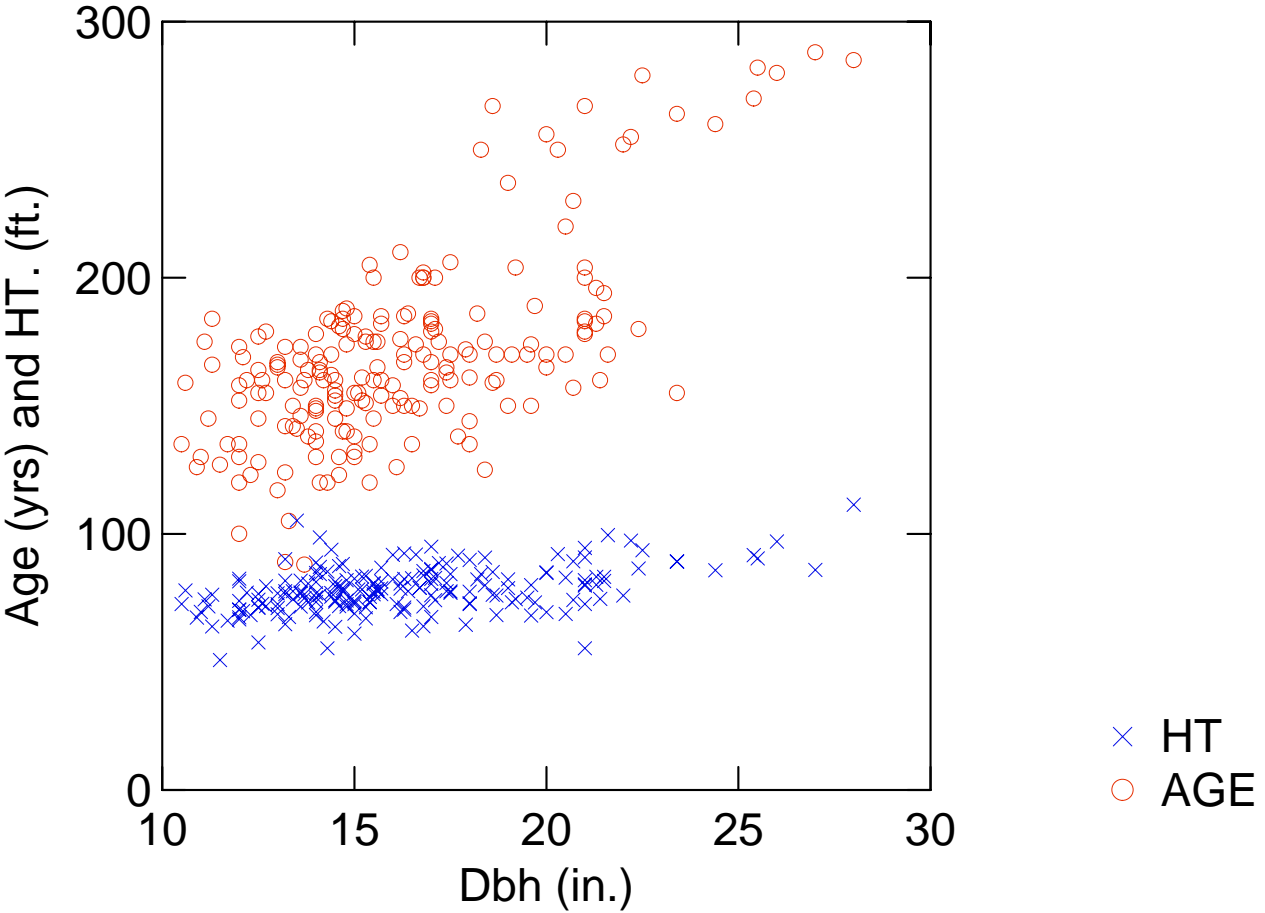
SM Saplings Under Plots w/wo PB Overstory (1931-32)

–	<u>PB Overstory</u>	<u>No PB Overstory</u>
• Cut Once	31	19
• Cut Twice	35	13

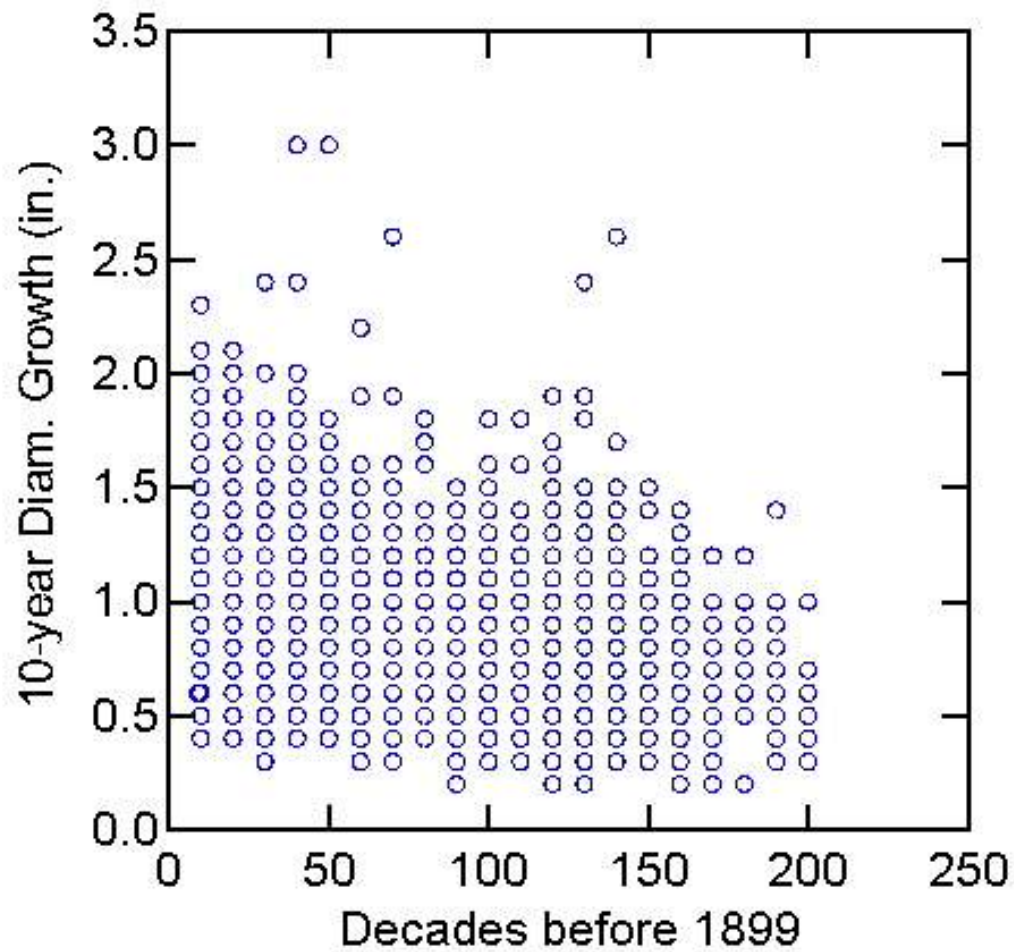
Annual Dbh Growth (in.): Thinned 60-70 Year Old Stands

•	1941-51	2003-2005
• Beech	.16	.15
• Y. Birch	.11	.11
• S. Maple	.15	.16
• R. Maple	.13	.16
• W. Ash	.12	.12

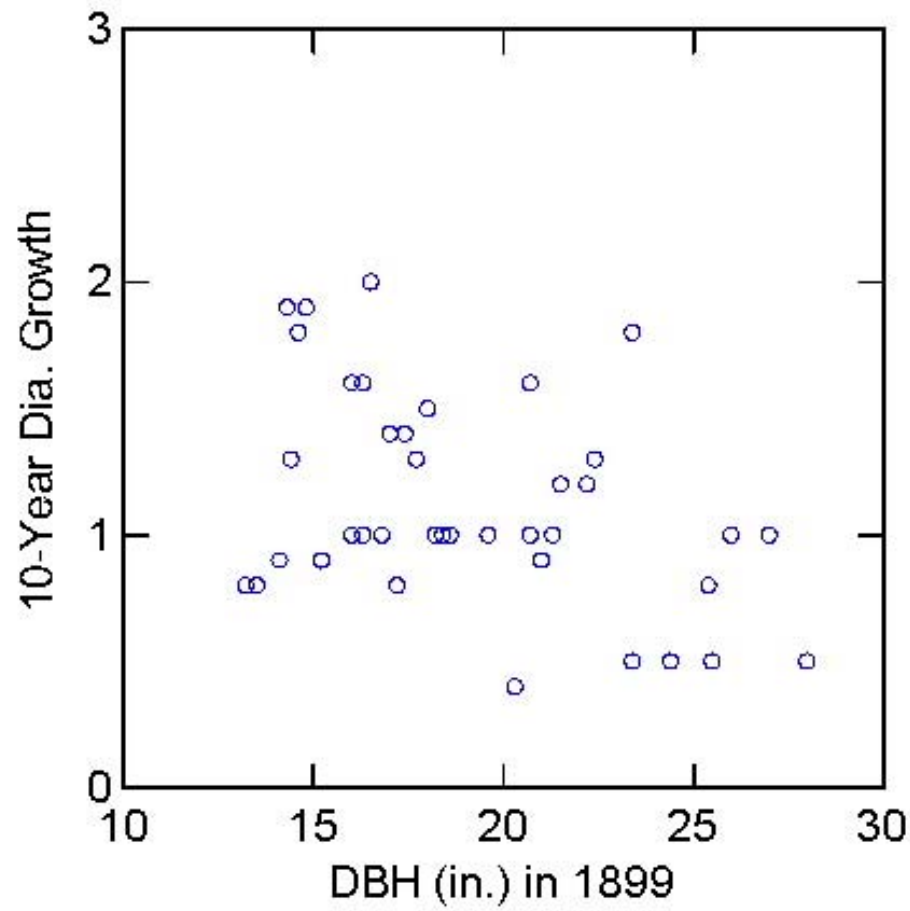
Sugar Maple in 1899 (St. Regis Tract)



10-year Diam. Growth, Top 1st Log



DIA. GROWTH, DOM. TREES, 1899



Elevational Changes: % of Basal Area in Hemlock

<u>Elev.(ft)</u>	<u>1931</u>	<u>1992</u>
• 650-1150	13	25
• 1640-2130	3	8
• 2130-2690	1	3

Elevational Changes: Percent BA in Red Spruce

• <u>Elev.(ft)</u>	<u>1931</u>	<u>1992</u>
• 650-1150	5	7
• 1640-2130	22	26
• 2130-2690	34	43