

## Forests & Conservation – Ideas – 2014

### Forest

Dominant cover today –throughout pre-history; most intact part of the landscape.  
Undervalued and underappreciated; not hot spot; not heavily disturbed diverse areas.  
Low diversity; studies emphasize rich forest.

How did forest recover so fast and heavily seeded trees spread so quickly? Mechanisms?  
Generalities? Use for restoration? Barren plain, no forest, scraggly woodlands to forest.  
Not old field white pine. Few dispersers–squirrels are few. Passenger pigeons? Jays?

Ho – Ancient woods even-aged; former woodlot; oldest trees; sprout clumps–similar age.  
Ho – Vast majority early 20<sup>th</sup> century as ↓ farms, ↑ forest, ↑ coal. Where are stools?

Succession. Pitch pine into fields advanced guard followed by oaks dispersed by  
squirrels, jays, pigeons; many areas lack pines; pure oak and short time.

Clues to land-use history – sprouts, stools, growth forms; size; understory; invasives;  
artifacts; blow down; fire. Tree forms– legacies of past; moldering relics; transient forms.  
Quansoo, Menemsha Hills, Spring Point,– magical trees– surrounded taller, straight.  
Cedar Tree Neck– Sassafras contorted. Wasque Pines – wind and salt shaped. Naushon –  
Beech–tiny to immense; contour-fit oak and beech. Uproots – branches new stems–  
confined to few species- Red Maple, beech not oak, pine – so more prevalent on Naushon

Forest types – Beech; oak-Huckleberry; oak-Huckleberry with scrub oak; pitch pine-oak.

Forests –history, inertia, trajectory, future; interact with environmental change;

What was pre-settlement forest and how was it changing? How has 400 years of history  
altered this? What is modern trajectory and what will change this in the future?

General mesophication of forest since 1900. Spp increase that were common in the past.

Associated wildlife dynamics.

Where did fields come from? When Thomas Mayhew arrived – woodlands or open fields  
ringed with houses? historical reality – regardless of ancient roots, over the last 350 years  
open lands have been maintained, expanded, shaped and conditioned by colonial  
agriculture – cutting., clearing, mowing, plowing, burning and grazing.

Assumption – memory or history as far back as one can reconstruct it is the way it was  
for a longtime – or forever. Rare species – to first knowledge of abundance – generally  
19<sup>th</sup> century. Assume because it was there it is native and more abundant. Species on  
banged up, disbursed bed sites, eroding bluffs – but bluffs are time transgressive,  
continually moving so rare species are moving. Into former woodland.

Beech – status. Was it more abundant? Future increase? Constraints on it – fire, hurricanes. Factors favoring it – grazing and browsing

Inertia – once something established it is difficult to remove. Tendency to perpetuate. Pines – fluke of e.g. disturbance versus seed source allows to establish. Will grow for 200 years, producing seeds many years and scattering it, likely to perpetuate. Intro - MCSF tree blows down or horse path through the plain; couple hundreds of yards away pine tree casts seeds that lodge on torn edge of sedge tuft and take root. One hundred and fifty years later the pines stand in a row. Today, mowing along the fire lines is yielding the same impact – pines rooted along the margins.

Secondary woodlands. Critical distinction– gradations of impact (soil disturbance) and original species removal. Eliminate native flora. Inertia in its removal, decline and replacement. Inertia in its recovery and re-establishment. Insertion of new flora. Competition. Change soil conditions, biota, genetics.

Sieve – elimination of some species; addition of others; preferential enhancement; differential reduction; big nuted species – how fast can move.

Photos: Successional cedars, Secondary woods, Successional pine, Open oak, Open oak in younger forest, Sprout woods, Hurricane trees, Stools. Gaylussacia clones in open pastures.

Pine distribution – what explains this?

### **Notes for Conservation**

Identify MVLB to highlight using records

#### **Peaked Hill Reservation 3-11-2002**

132.5 acres, 91 owned.

Will plant Atlantic White Cedar – “Reintroduction: [sic] to Martha’s Vineyard.

Pennywise - Only Land Bank property with scrub oak bottom.

Lowest part of Pennywise on Tar Kiln Path – grass due to colder and disturbed.

#### **Baldwin, H. I. 1928. *The Trees of Nantucket.***

Josiah Sturgis – 1847, 1852, 1853 – pine plantations. Sturgis and Gardiner Pine Lands on current State plantations.

H. D. Thoreau 12-28-54. Capt. Gardiner at Siasconset – planting pines on tracks to 300 acres – Pitch and some Norway, from Cape and France (*P. sylvestris*), couldn’t get white pine.

**Freeman 1807** Skunk, muskrat, mink, mice, moles, rabbits, others – no deer, fox, squirrels.

Swift & Cleaveland 1903. 1823 – Reconsidered to except hunting of heath hen; \$5 fine for Heath Hen – split with poor and complainant. 1842 – Law for preservation of grouse or heath hen be suspended in Tisbury to allow inhabitants to kill, take or sell from December 1-10 – without dogs.

November 14, 1842 – Warrant to prevent illegal hunting and shooters of heath hen first ten days in December.

Committee of vigilance to see that non-residents don't trespass on town rights to shoot heath hens the first 10 days in December. Printed in *New Bedford Mercury and Weekly Register*.

### **Ancient Woodlands**

1872 - W Chop – 1<sup>st</sup> proposed development “lands mostly covered with forest trees”;

1969- SGF sold 32-ac along Indian Hill Road up both sides of Christiantown Road... Land known as “Harry Peakes Wood Lot” “In early days each householder found it essential to have his own wood lot to supply him with winter fuel. Similarly, the Indians required wood lots, and much of the Indian Hill area was so classified. The nearby land now belonging to Amos J. Amaral, for example, was once all Indian wood lots.” VG 12-12-1969

### **Peculiar things we do in the MV Woods**

- Clear understory for ticks
- Plant non-natives – Rhododendrons, conifers etc – state forest, wind breaks, diversity, screening, to stop use of trails
- Savannas
- Fire
- grazing

### **General Thoughts on the Natural and Cultural Landscape Chapter**

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#### **Overview of Vegetation**

May seem strange to reach the present at the end of a book. But modern landscape is shaped by the past; need those perspectives to explain and understand it.

Introduce major vegetation through general history and then explore specific sites.

Forest: Legacies of the Past – AW, SW; distribution and history; impacts overall on composition and structure; what is present and missing; how they vary edaphically;

Woodlands Types – Explore through places on the ground

*Pine forest* – AW: West Chop Woods (SWoodlands; Ripleys Field); Versus 2ndary and planted pines – Wasque, Presbury Norton, MFCSF, Caroline Tuthill, Felix Neck (?))

*White Oak forest* – MFCSF/Pohogonot (Felix Neck/Caroline Tuthill, Greenfields, Wapatequa, Chappy)

*Scrub Oak woodlands* – MFCSF (Chappy)

Beech Forest – Polly Hill; Seven Gates; Cedar Tree Neck;

*Secondary Oak Forest* – Quansoo (Menemsha Hills, Waskosim's, Wompesket)

Grasslands, Heathlands, Shrublands. Use Foster and Motzkin as opening understand and then explore: Katama, Wasque, Long Point etc.

### **Reading the landscape in clues of the past**

Biological structures – stools, sprouts, multiple stems, stumps, contortions

Microtopography – uproots, ridge and furrow, microrelief

Cultural relics – mined stones, clay pits, cellar holes, fencelines (wire, posts, ridge and furrow)

### **Wildlife – Past, present, future**

#### Wildlife Dynamics Figure

Major decliners – grassland, shrubland species

Major increasers – forest species; deer skunks; squirrels; raccoons? otters

Arrivals – Turkey vultures & Black vultures;

Extirpations – Heath Hen

Early extirpations – Beaver, bear,

Reintroductions – Deer, squirrels, skunks

Visitors - Coyotes