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^{th} century as \downarrow farms, \uparrow forest, \uparrow 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 19th 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 nutted species – how fast can move.

Photos: Successional cedars, Secondary woods, Successional pine, Open oak, Open oak in younger forest, Sprout woods, Hurricane trees, Stools. Gaylusaccia 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 – 1st 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