

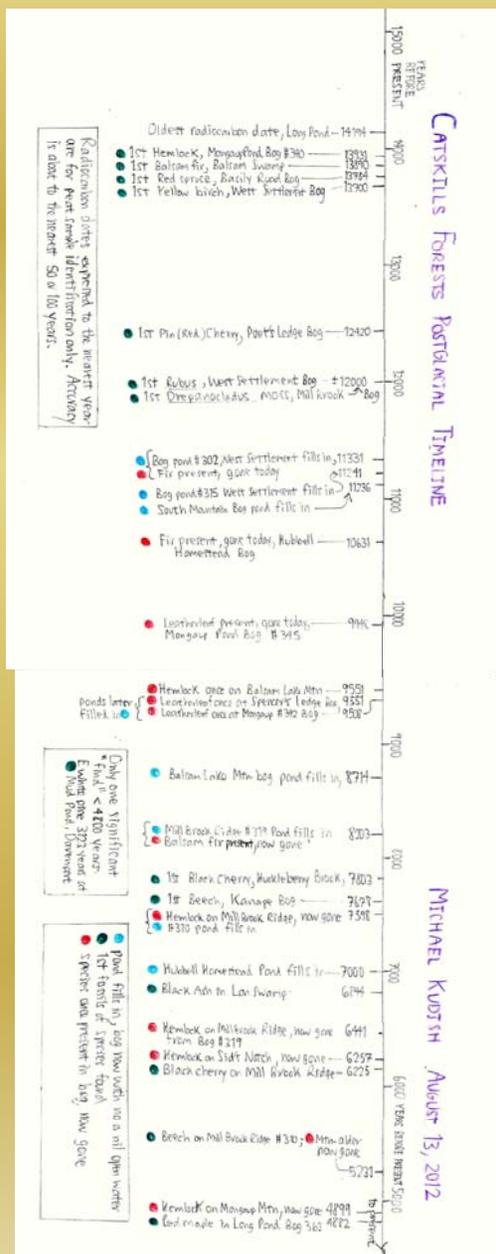
# Three Episodes in Catskill Forest History

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Presented at the 2<sup>nd</sup> Catskill Environmental Research & Monitoring Conference, Oct. 25-26, 2012, at Belleayre Mt.

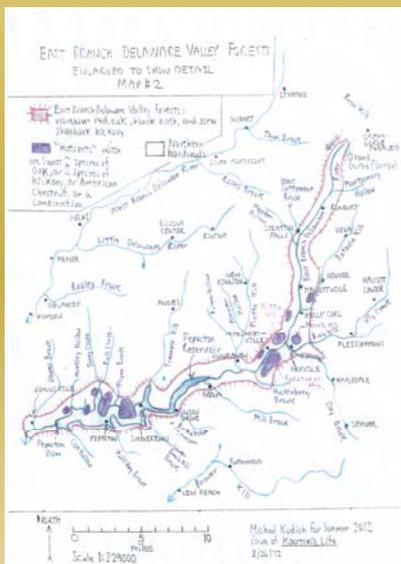
## Episode One:

Post-glacial species arrival, species disappearance and pond filling time line, 15,000 to 1,500 years B.P.



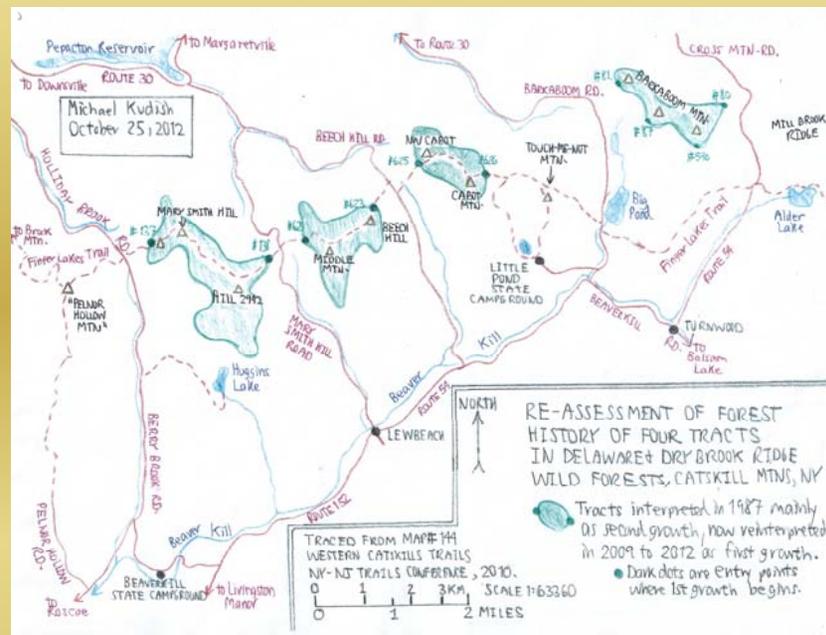
## Episode Two:

Native American nut orchard hypothesis, 1,500 to 250 years B.P.



## Episode Three:

1st Growth Forests, just discovered in 2012, not touched by Europeans, 250 years B.P. to present



Three episodes in Catskills forest history have been intensively studied since the 2010 Catskill Environmental Research & Monitoring Conference:

- 13,700 years before present (B.P.): Climate change must have been rapid because it became warm enough to support abundant hemlock, red spruce and yellow birch (not true boreal species) in addition to balsam fir (a true boreal) throughout portions of the region. The absence of red spruce and balsam fir today in the valleys and adjacent ridgelines of the East and West Branches of the Delaware River is not because these conifers had disappeared, but rather because they were never present (except for a few fir fossils). By 10,000 year B.P., aquatic plants had disappeared from several East Branch Delaware Valley ponds. The basins had filled in with peat and the invading forest had lost what few fir it had.
- Between ca. 1,500 and 250 years B.P.: Can the enigmatic, isolated remnant groves of three species of oaks, two hickories, American chestnut, mountain laurel and sweet fern in the East Branch Delaware Valley between Grand Gorge and Downsville be explained by Native Americans planting nut orchards on the lower slopes adjacent to their crop lands on the flood plain?
- 250 years (European settlement) B.P. to present: Three tracts of first growth forest were discovered just this summer on Cabot, Middle and Mary Smith Mountains in the far southwestern Catskills. These tracts, the largest addition to Catskills first growth mapping in decades, when combined, total over two square miles (over 1280 acres or 520 hectares).