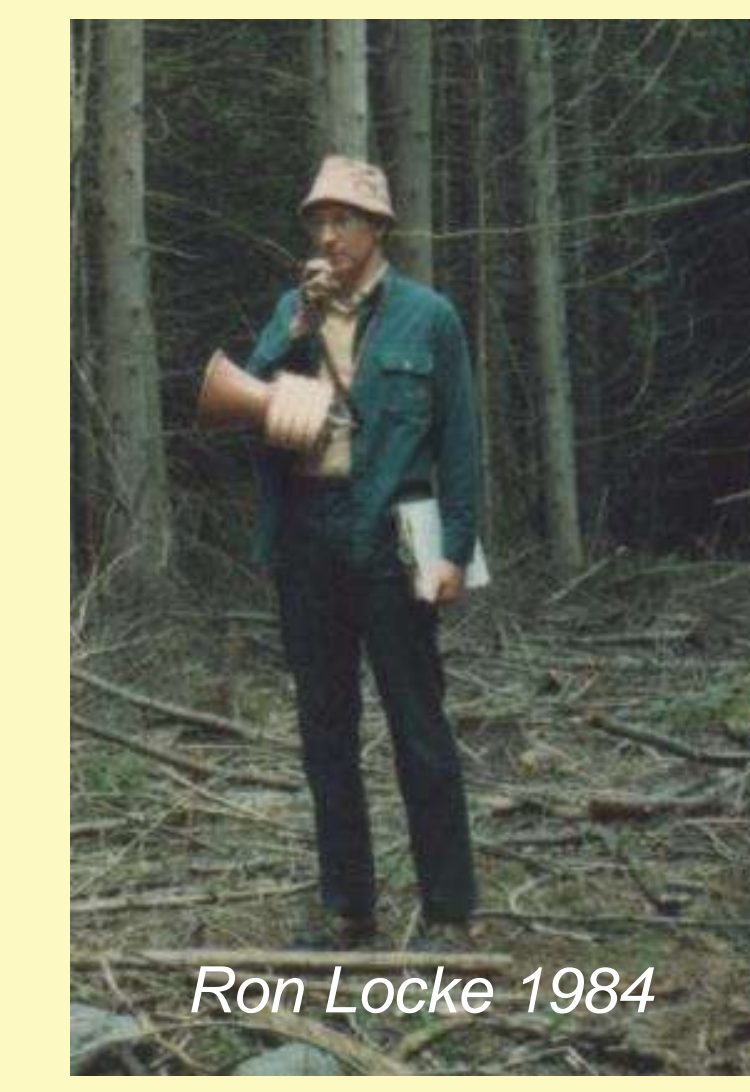


Wicopy Woods Tree Farm: A Rare 50-year Record of Forest Productivity and Stewardship

Bob Seymour and Jessica Leahy Co-owners, SocioSilv LLC



Ownership History

In 1968, Ron and Stephanie Locke purchased a run-down farm and woodlot in Sebec, Maine. Over the course of his active career as a forester, which included the Maine Forest Service, Columbia Plywood, the Dover-Foxcroft Forestry Cooperative, and a self-employed consultant, Ron worked the land himself, cutting 1,500 cords of various products and selling another 500 cords of stumpsage.

Wicopy Woods - named after the rare leatherwood shrub (*Dirca palustris*) - has been a certified Tree Farm for over 40 years, winning Maine Outstanding Tree Farm of the Year in 1984. The property was also a Forest Guild Model Forest, and has been featured in countless tours during Ron's tenure. Ron retired and moved to New York in 2006. After leaving Maine, Ron entrusted consulting forester Bill Mahan, NESAF 2014 Austin Cary award winner, with the on-site stewardship responsibilities.



Succession Planning & New Ownership

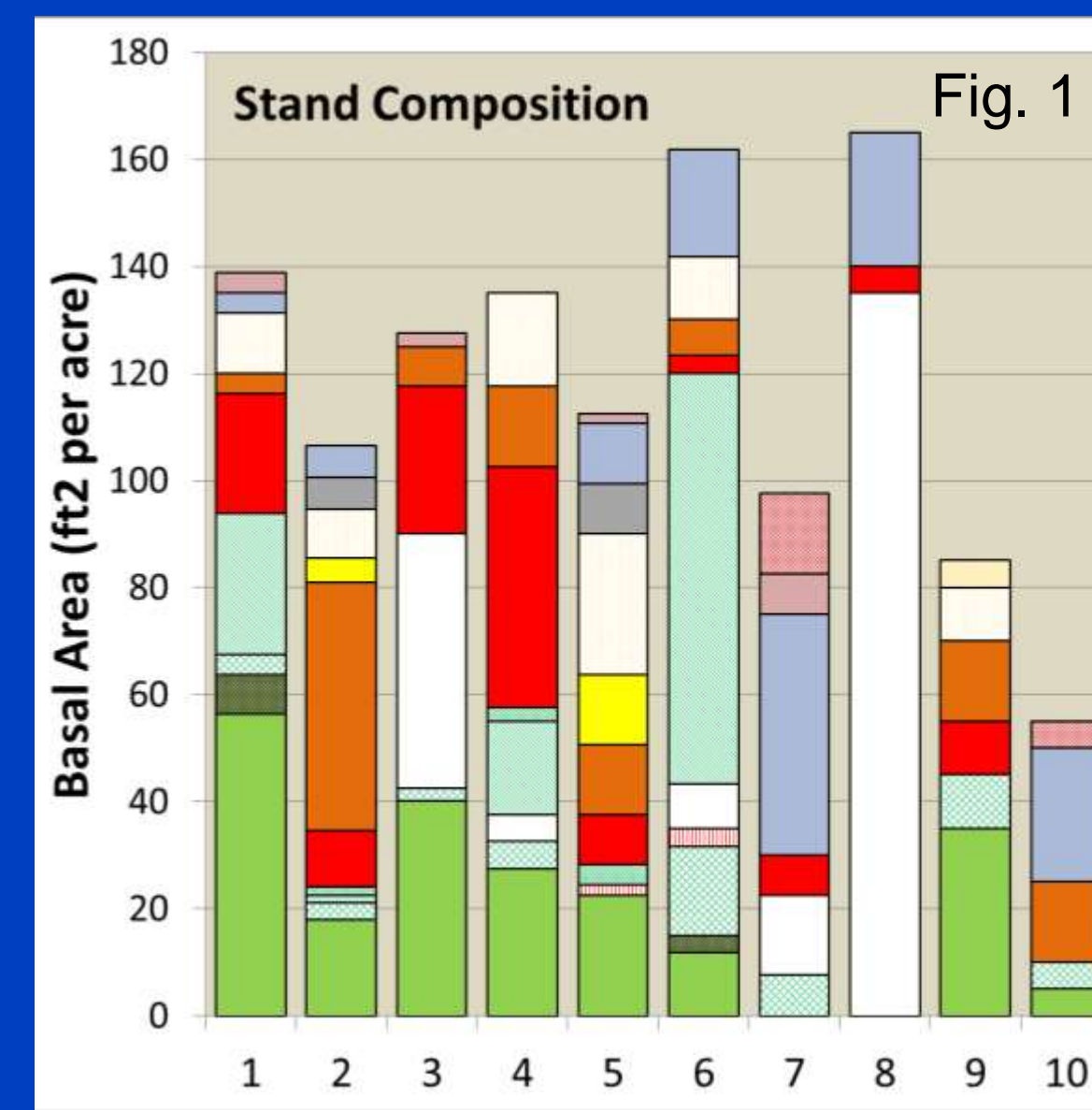
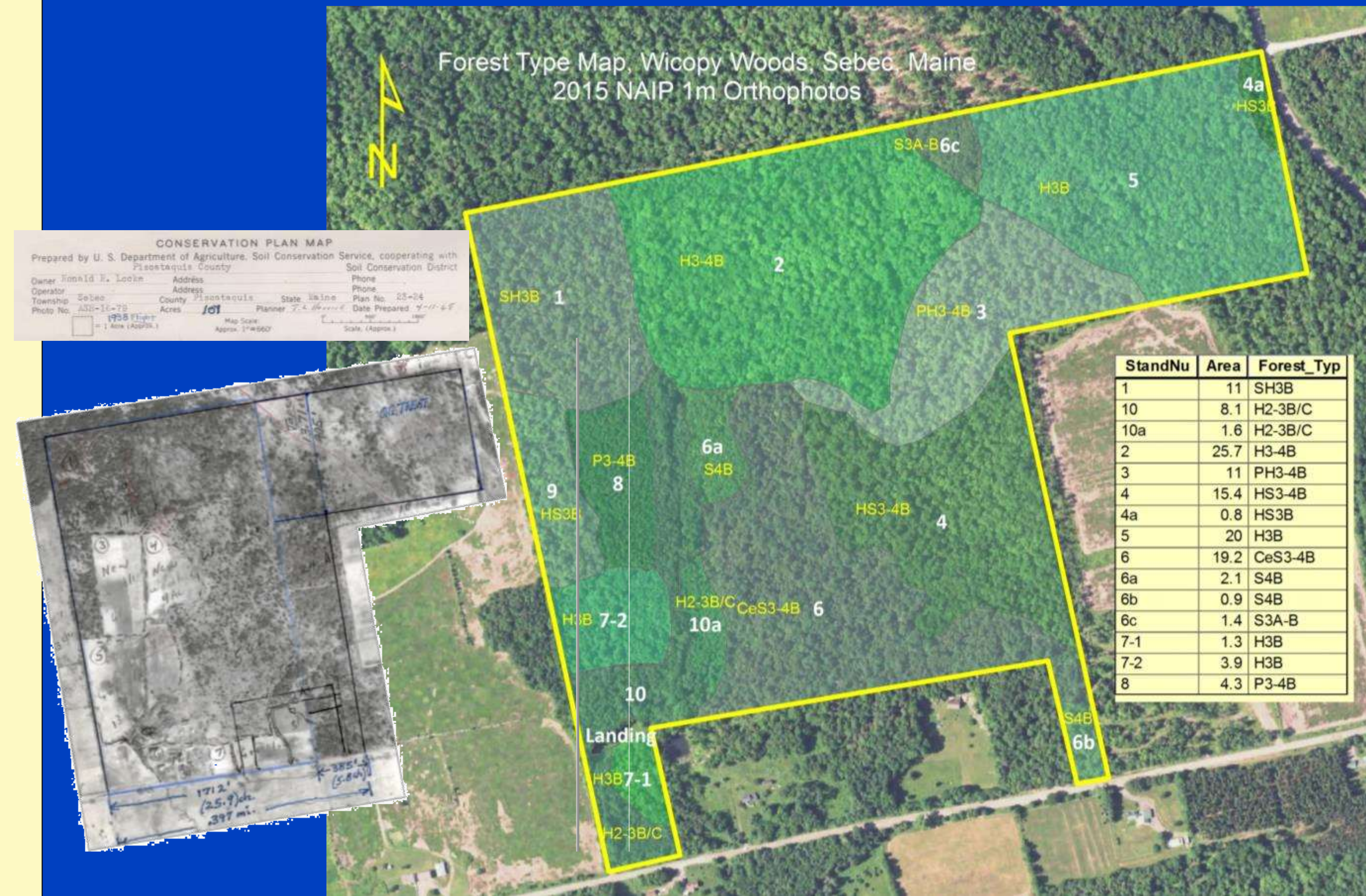
Ron's written management plans began featuring a section on succession goals in 2001. We learned of his desire for future stewards in 2014, toured the property, walked the land with Ron, and developed an agreement over the course of a year and a half. In 2015, we acquired the property with the goal of maintaining Ron's exemplary stewardship, while also documenting, summarizing and publicizing Ron's voluminous records (samples below). We think this is a good example of succession planning.

First Page - 1970 Last Page - 2006 1979 (who knew what lay ahead?)

1978 Cruise Map, Tally Sheet

Current Stand Composition

The forest is quite diverse overall, with 16 species (Fig. 1). Sugar maple ranks first in total cubic volume (17%), followed closely by red maple (14%), northern white-cedar (13%), paper birch (13%) and white pine (12%). Pine dominates sawtimber stocking (32%), with sugar maple and cedar tied for second at 14% each. Red spruce and hemlock are rare; white ash dominates old-field stands 7 and 10.

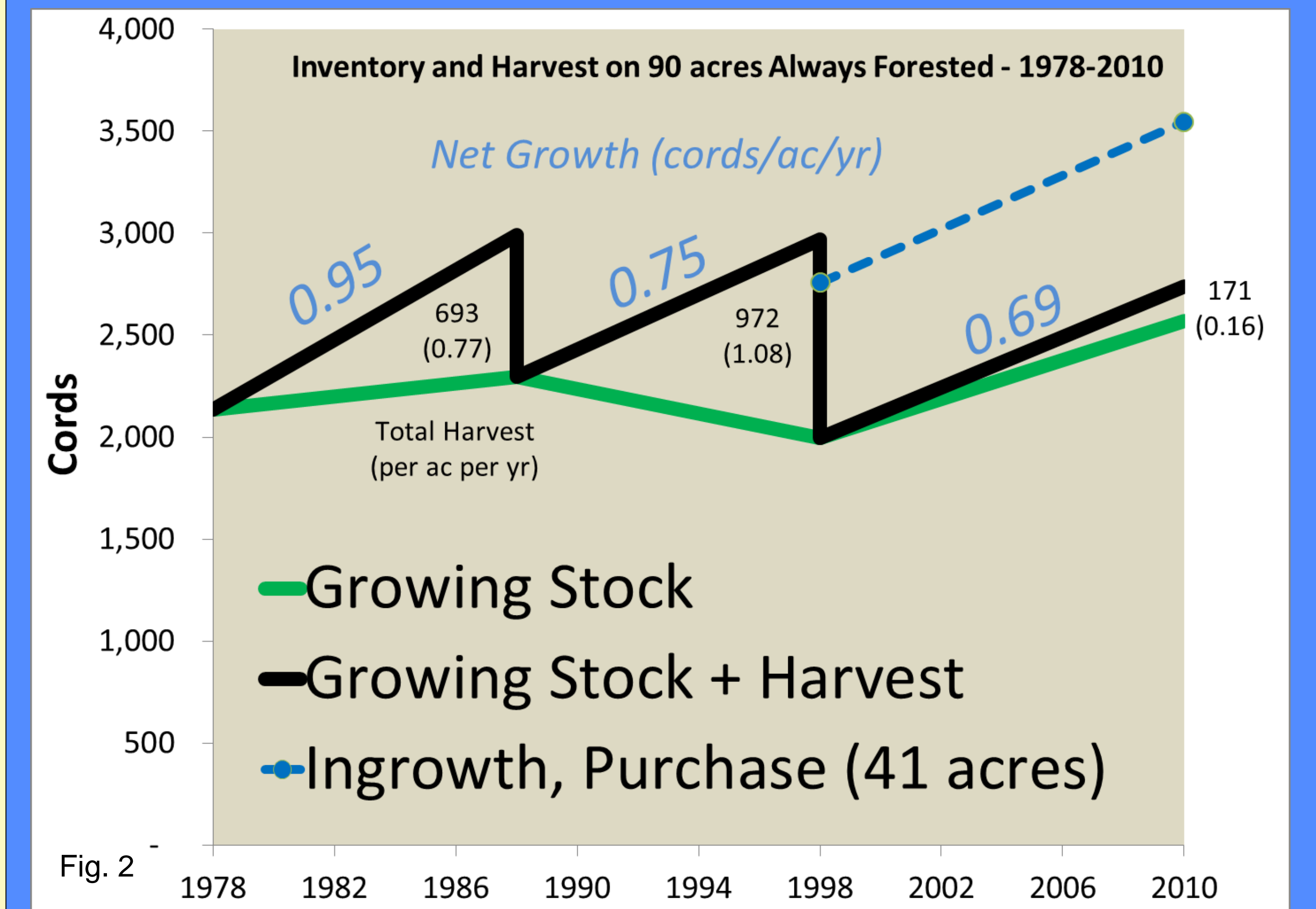


Inventory Data

The original "Home Lot" consists of 124 acres acquired in 1968 and 1972; 25 acres of managed, high-site northern hardwood (stand 5) was added in 1996. By 2007, sales of road frontage and buildings reduced this total to a net acreage of 131. In addition to the 1968 cruise of the original 100-acre Peterson Farm, we have detailed inventories taken 4 times: in 1978 (map on bottom left), 1988, 1999, and 2010, generally with an exceptionally high intensity of 1 plot for every 1-2 acres. Of the original 124 acres, 90 acres were always forested and thus inventoried on all occasions; the remaining fields have now reverted or were planted but were not cruised until the late 1990s. FVS was used for all inventory calculations; ArcGIS and Google Earth handled the mapping.

Growth

From 1978 to 2011, stocking increased from 2,137 to 2,570 cords; sawtimber stocking rose from 195 to 329 MBF. Over 32 years, these 90 acres produced 2,270 cords of wood (1,837 harvested plus 433 increase in stocking), equal to 71 cords per year or 0.79 cords per acre. Figure 2 shows the breakdown by 3 decadal periods. Additional volumes on 24 acres purchased in 1996, along with ingrowth on reverting fields, gives a total stocking of 3,547 cords (27.3 per acre) in 2011. Sawtimber comprises 34% of the total volume.



Financial Performance

In 1967, consulting forester Jim LaCasce appraised the original 100 acres for \$5,820; \$10/acre bare land and \$48.20/acre in timber. Using current stumpage prices of the 2011 growing stock, adjusted downward for recent decline in softwood pulp prices, the standing timber on 131 acres in 2015 is worth \$87,965. This yields a nominal rate of return of 6.2% compounded annually over 48 years. This does not include the income from over 2,000 cords harvested that would in today's prices bring over \$50,000 – more than 10 times the original value of all the standing timber.

Stewardship Challenges

All is not perfect here! Some of the more immediate issues facing us are: 1) understories dominated by fir, 2) chronic mortality from balsam woolly adelgid, 3) 40 MBF of scattered mature white birch, 4) an overstocked white pine plantation, and 5) relocating hundreds of Ron's numbered "Growth Monitor" trees (once measured annually).

