

Cotton Farm Apple Orchard Management Plan



Cotton Farm Orchard

Prepared for the Lexington Conservation Commission
by Jeff Howry
June 18, 2018

Executive Summary

The apple orchard located north of Marrett Road in the Upper Vine Brook Conservation area presents a unique resource for the Lexington community. This management plan contains a series of recommendations for engaging members of the community through participating in its restoration, ongoing maintenance and sharing the fruit it can produce. It is hoped that the orchard will provide a living example of how an orchard, an essential component of Lexington’s agricultural history and that of New England, can provide insights into the lifeways of the earliest English settlers in the 17th and 18th centuries and the agricultural transformation of Lexington and much of Massachusetts in the 19th century.

The document begins with an overview of the current conditions of the orchard and the area immediately around the orchard. The plan outlines a series of goals over the next five years whose objective is to provide a sustainable orchard that will produce fruit in a pick-your-own manner, as well as provide specialized apple varieties of interest to ‘orchard stewards’.



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History and Condition

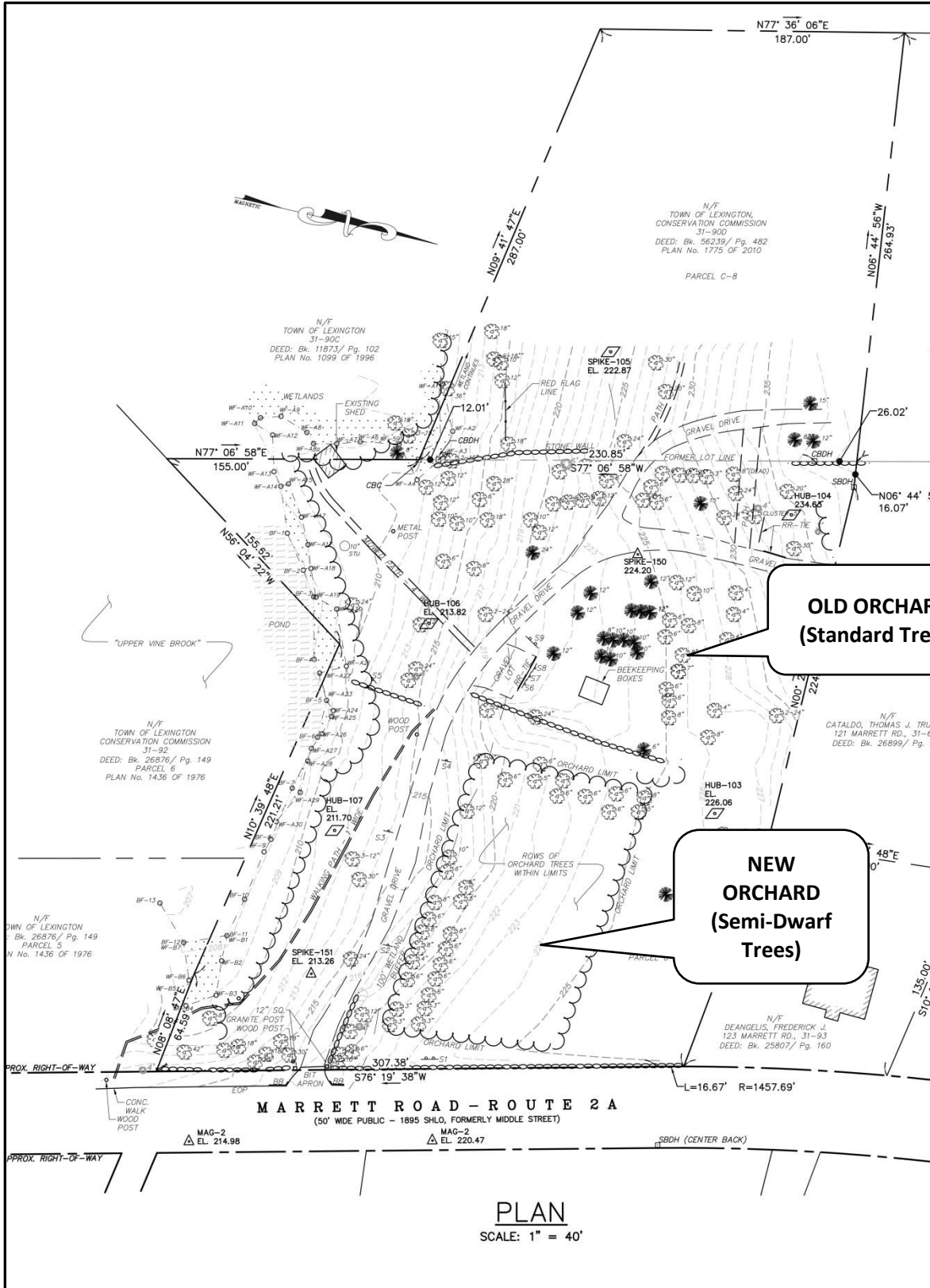
The Cotton orchard was planted approximately 30 years ago by the Cataldo family. They planted trees on semi-dwarf rootstock with exclusively Macoun apples on the rootstock. After several years of production and selling apples through nearby Wilson Farm, production was not continued. To the north (or the rear of the New orchard) are several much older fruit trees, including a full-size Baldwin tree, two full-size Granny Smith trees and a few pear trees which constitute the Old orchard. These older trees have received minimal care but have potential for future fruit production.

Over the past two decades, and particularly since the town’s acquisition of the Upper Vine Brook Conservation area, orchard maintenance has consisted of mowing, limited mulching and ornamental pruning.



Aerial Photo

Existing Conditions



Near Term Goals – Years 1 & 2

- a. Complete a tree inventory, including the tagging of each tree, and prepare a map showing the location of each tree and their variety.
- b. Provide nutritive mulch surrounding each tree; fertilize and remove overlapping tree branches within each tree and from adjacent trees.
- c. Develop pruning guidelines. Prune for improved horizontal limb growth to increase fruit production.
- d. Develop an Annual Maintenance Schedule & Plan,
 - Mow consistently to minimize invasive weed species
 - Seasonally remove fruit ‘drops’ to limit the annual renewal of fruit pets from decomposed apples
 - Develop a pest management plan that is ‘bee-friendly’ by working with the resident bee keeper
- e. Begin selective grafting of additional desert fruit on lower branches where harvesting will not require use of poles or ladders. The rationale is two-fold: 1) apples require cross-pollination by other varieties to be most productive, even though the variety of the particular wood remains constant; 2) community members picking their apples will have a greater variety from which to choose.
- f. Develop a pest management plan that is bee-friendly by working with the resident bee keeper.
- g. Initiate Orchard Steward Program (Fall 2018) Engage individuals interested in being ‘orchard stewards’ and who would participate in grafting heritage cider varieties on selected semi-dwarf trees
- h. Phase I – Seasonal Pollinator plantings. Plant perennial flowering plants that have spring, summer and fall blooms.

Long Term Goals – Years 3 - 5

- a. Replant trees of *different varieties of apples* on semi-dwarf stock in locations where semi-dwarf trees have died or been removed.
- b. Improve fruit production for community use.
- c. Phase II – Seasonal Pollinator plantings
- d. Maintain Orchard Steward Program
- e. Prepare educational materials (e.g. posters for Cotton Farm display board and school curricula) that will inform the visitors and the community about the role of orchards in 17th – 19th family farms.
- f. Review and Revise Orchard Management Plan

List of Recommended Varieties to Graft and Replant

The goals of the proposed revitalization of the Cotton Farm Orchard are two-fold. Firstly, to provide Lexington residents with a sustainable source of locally grown apples. Secondly, to provide interested members of the community with fruit varieties that reflect the uses and tastes of prior centuries when residents raised far more of their food. It is hoped by understanding the foodways of our predecessors we can appreciate better how they lived and enhance the choices we make today about the choices of food we consume.

Dessert Varieties [Origin] (Ripening months)

Cox Orange [England, 1830]

Roxbury Russet [Roxbury, MA, 1649]

Early William [Roxbury, MA, 18th century]

Mother [Bolton, MA, early 1800s]

Tolman Sweet [Dorchester, MA] (November – January)

New Town Pippen [Newtown, New York, pre-1768]

Westfield-Seek-No-Further [Westfield, MA]

King of Pippens [England – mid-1800s]

Bleinheim Orange [England mid-1800s] (October – December)

Cooking/Sauce Varieties

Northern Spy [East Bloomfield, NY, 1800]

Porter [Sherburne, MA ca 1800] (September – November)

Rhode Island Greening [Newport, RI, ca. 1700] (October – March)

Cortland [Geneva, NY, 1898]

Gravenstein [Northern Europe, 17th century]

Cider Varieties

Styre [England, 1600s]

Readstreak [England, 1600s] (bittersweet)

Foxwhelp [England, 1600s] (bittersharp)

Kingston Black [England, late 1800s] (bittersharp)

Suggested Seasonal Plantings

Flowering plants selected for the orchard should be perennial varieties so as to avoid the necessity of replanting.

Spring

Lavender

Lugworts (e.g. Pulmonaria)

Crocus

Hyacinth

Borage

Calendula

Summer

Mint varieties

California poppies

Daisies

Bee Balm

Cosmos

Snapdragons

Hosta

Fall

Asters

Zinnias

Sedum

Sources

Honeybee Conservancy – [Plant a Bee Garden](#)

Friends of the Earth – [Trees & Shrubs for Bees](#)

Orchard Budget Items

The table summarizes a number of items which would require funds beyond the current grounds maintenance currently provided by the Lexington Conservation Commission.

**COTTON FARM ORCHARD 5 YEAR BUDGET (FY19-FY23):
BUDGET SUMMARY**

Equipment	\$1,579.12
Plant Stock & Perennial Seed	\$1,695.00
Orchard Supplies	\$430.00
Shipping & Contingency	\$370.41
	\$4,074.53

*Detailed budget on following page.

