

Wellesley Conservation Council Land Management Plan (Draft)

Cronk's Rocky Woodland



Prepared for the Wellesley Conservation Council
by William Giezentanner
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Executive Summary

Description

The Wellesley Conservation Council (WCC) was given Cronk's Rocky Woodland in September, 1977 by Gertrude Cronk in memory of her husband Corydon P. Cronk. This small woodland preserve of native wildflowers was next to their home at 10 Crown Ridge Road and had been in their care for nearly thirty years. Cronk's Rocky Woodland is surrounded by a rustic split rail fence with a gate at the entrance on Crown Ridge Road and includes a small "garden house" and a short trail network with some marked wildflowers and shrubs. Some of the beautiful wildflowers found here are Jack-in-the-Pulpit, Pink Lady's-slippers, Jacob's Ladder, Yellow Trout Lily, Black Cohosh and many other varieties.

Conservation Values

The approximately .6-acre land area (25,813 square feet) was planted by Mr. and Mrs. Cronk with a diverse collection of wildflowers and shrubs and set aside by Mrs. Cronk for all to enjoy.

Perhaps most significantly it is totally surrounded by a dense neighborhood of single family homes and stands out as a miniature vestige of nature in an otherwise developed area. Planted as a wildflower garden, it is also significant as a botanic display in a naturalistic setting. Walks in Wellesley, a booklet of the Wellesley Conservation Council describes the woodland thus:

"A true 'New England woodland' of oaks and pines on rocky ledges, this sanctuary is a fine example of how the protection of existing plants and the wise addition of other indigenous plant material can preserve a broad sample of a town's natural heritage. Although there is interest here in every season, this sanctuary is a feast for all the senses during the spring."

Summary of Restrictions

The land was given to the WCC in 1977 (it is now assessed at \$669,000, including \$6,000 for the garden house). The Title to the land was transferred with approval of the Massachusetts Land Court without restrictions.

Threats, Opportunities and Actions

There are no known significant threats to the property.

Opportunities for Cronk's Rocky Woodland include educational programming related to its botanical resources.

Actions needed are a detailed inventory of the botanical resources of the property, educational program development, and small scale management of its botanical resources.

Acknowledgements

Judith Boland, the current Steward, lives next door to the woodland and assisted in preparing this management plan.

Ted Elliman of the New England Wildflower Society volunteered to update the plant list and to advise on management.

Table of Contents

| | |
|--|----|
| Executive Summary | i |
| Acknowledgements..... | ii |
| Introduction..... | 1 |
| Acquisition History | 4 |
| Natural Resources | 4 |
| Human Context..... | 6 |
| Current Use and Management..... | 6 |
| Stewardship Targets, Goals, Threats, and Protection Strategies..... | 8 |
| Implementation Table | 9 |
| Appendix | |
| Cronk’s Rocky Woodland – 2004 Plant List with Approximate Bloom Dates .. | 11 |

DRAFT

NORTHWESTERLY by lot numbered 50^B, as indicated on said plan, one hundred fifty-seven (157) feet.

Said parcel is shown as lot numbered 62 on a plan drawn by Joseph Selwyn, Surveyor, dated August 12, 1977, as approved by the Land Court, filed in the Land Registration Office as No. 7058-4, a copy of a portion of which is filed in the Norfolk Registry District with Certificate No. 105169, Book 526.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said Wellesley Conservation Council, Inc. to said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may be subsisting, and subject also to any encumbrance(s) noted on the attached memorandum.

The attached memorandum lists three takings by the Town of Wellesley for laying out Crown Ridge Road and the sewer line in Crown Ridge Road in 1954 and 1962.

The Town of Wellesley Assessors map shows the property as below:

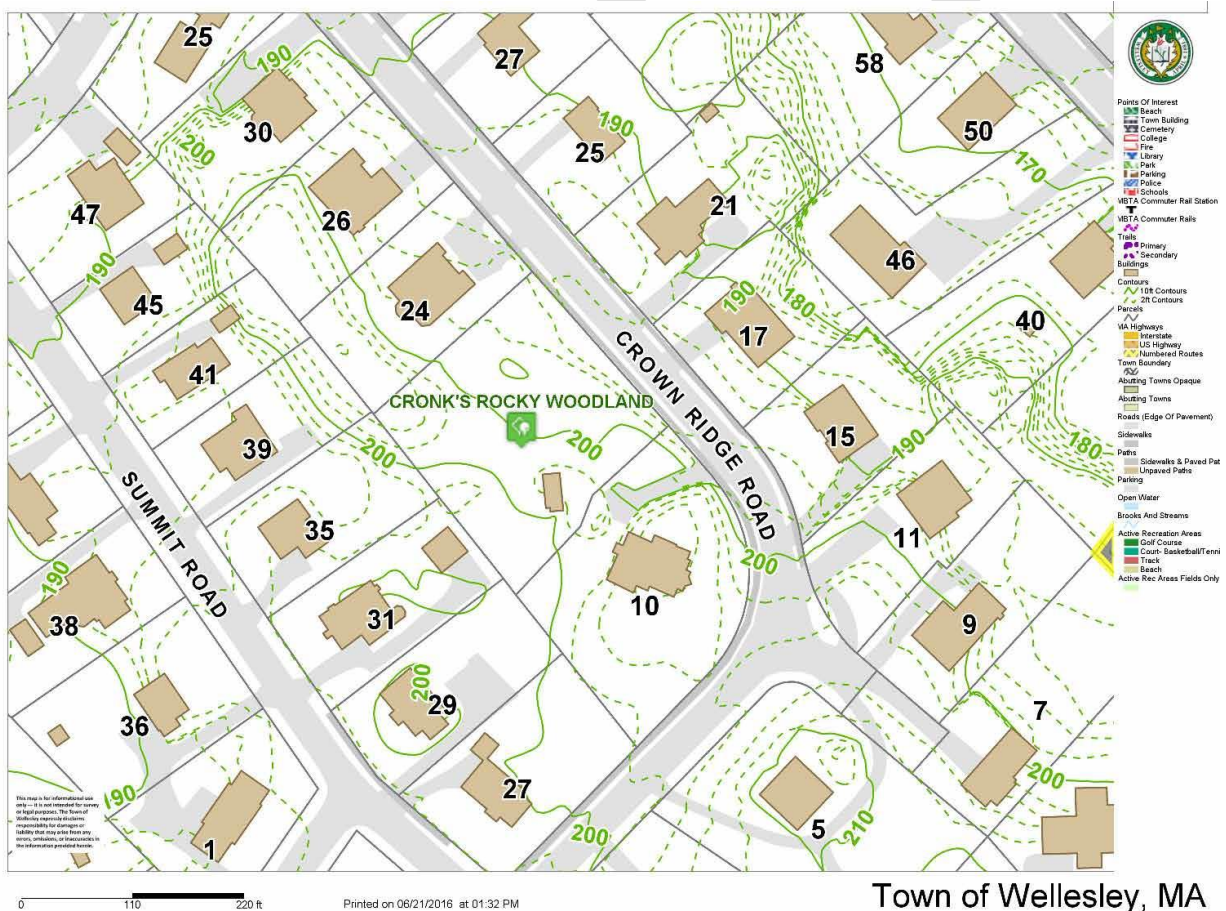


FIGURE 3 – CRONK'S ROCKY WOODLAND PARCEL MAP

Geographical Overview

The woodland is located in the north western corner of Wellesley between Linden Street and Worcester Road (Route 9) in a densely developed neighborhood of single family homes on mostly one quarter acre lots.

General Property Description

Cronk's Rocky Woodland is a small wooded lot with outcrops of bedrock surrounded by houses built between the 1900s to the 2000s. The parcel size is 25,813 square feet.

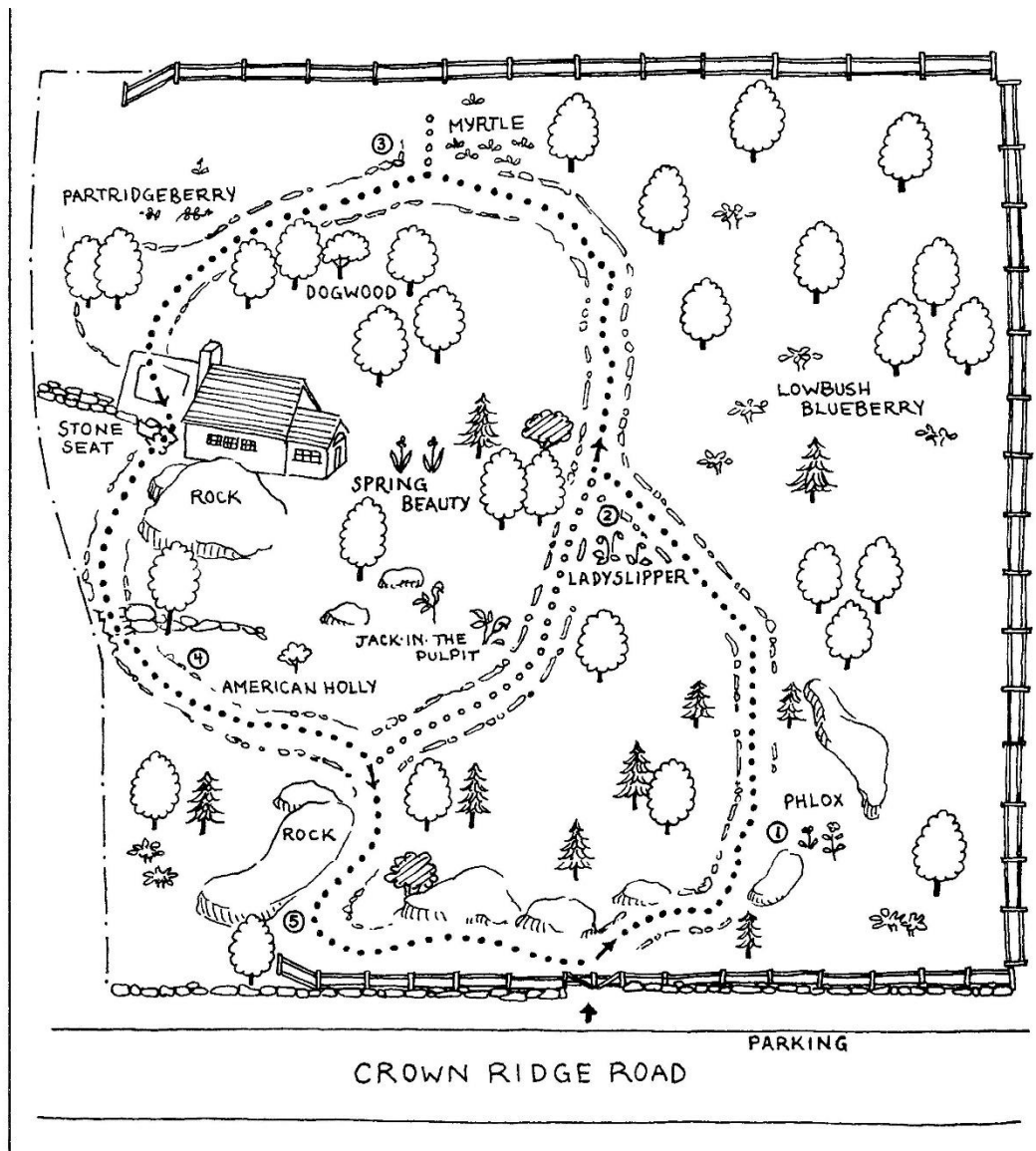


FIGURE 4 MAP OF CRONK'S ROCKY WOODLAND

Abutters

There are five properties that share a property line with Cronk's Rocky Woodland (#10 and #24 Crown Ridge Road, #29, #31, and #35 Summit Road). Numbers 17 and 21 Crown Ridge Road are directly across the street.

Open Space Context

Cronk's Rocky Woodland sets as a small .6-acre vestige of nature in an otherwise densely developed neighborhood. It is about 1,300 feet from the North 40, Wellesley's newest open space (and mostly in a wooded/natural state) and about 1,300 feet from the Sprague School athletic fields.

Acquisition History

History and Intent of Land Use

Cronk's Rocky Woodland was given to the WCC's in 1977 (it is now assessed at \$669,000, including \$6,000 for the garden house). Gertrude Green Cronk was a 1918 graduate of Wellesley College. Her husband, Croydon Patten Cronk, was trained and worked as a forester. They married in 1925 and moved to Wellesley in 1927. In 1928 they bought land on Crown Ridge Road and added to their lot in 1929, 1949, and in 1954. They shared a lifelong love of the outdoors. Mrs. Cronk also had a passion for music and audited courses at Wellesley College. It was Mrs. Cronk's wish that the woodland and its wildflowers would be available for enjoyment by the citizens of Wellesley.

Funding Source

The Directors of the Wellesley Conservation Council vote annually to provide a small budget for Cronk's Rocky Woodland. The amount for the 2017 is \$500 to support the garden, pay for a part-time gardener, and purchase plants and supplies.

Deed Restrictions or Conservation Easements

The Title to the land was transferred with approval of the Massachusetts Land Court without restrictions.

Zoning or Other Land Use Restrictions

Cronk's Rocky Woodland is in the Wellesley SR10 –Single Residence zoning district, allowing houses on 10,000 square feet parcel sizes.

Natural Resources

Topography, Geology and Soils

Topography

The gentle topography of Cronk's Rocky Woodland rises from 194 feet at Crown Ridge Road to a high point of 204 feet at the western corner of the lot. There are several outcrops of bedrock.

Geology

Cronk's Rocky Woodland lies in an extensive area of generally coarse post glacial deposits of sand and gravel overlaying Dedham granite, Salem Diorite, and other "basement" layer rocks more than 600,000,000 years old. Between the surface glacial layer and the lower, older layers there are often layers of rocks of volcanic origin like Roxbury conglomerate or "puddingstone". About 1,000,000 years ago northern ice caps began spreading south as the climate became colder. They covered much of North America as they spread and then melted and then spread again.

The ice pushed stones, gravel, clay, and other debris as they moved south forming deposits known as drumlins and glacial till. They also scraped some highpoints down to bedrock. The rock outcrops at Cronk's

Rocky Woodland are representatives of some of the basement layers. About 12,000 years ago the last of these ice sheets began to melt and leave behind the foundation of much of what we find today.¹.

Soils

The Norfolk County Soil Survey classifies the soil of Cronk's Rocky Woodland and much of the surrounding area as Charlton-Hollis urban land complex. Urban land consists of areas where much of the original soil surface has been covered by impervious surfaces, such as asphalt, concrete, and buildings and otherwise modified by development. The soils of Cronk's Rocky Woodland mostly consist of the Hollis component and is generally shallow and somewhat excessively drained. Depth to bedrock is often 10 to 20 inches. Typically, the surface layer of the Hollis soil is black fine sandy loam about 3 inches thick. The subsoil is dark yellowish brown fine sandy loam about 11 inches thick.²

Hydrology

There are no water features at Cronk's Rocky Woodland.

Vegetation

For a small site Cronk's Rocky Woodland has some remarkable diversity, a testament to the efforts of the Mr. and Mrs. Cronk and others who have worked to maintain and add to what they started. The canopy layer includes some 50 to 70 feet tall white pines, hemlocks, and oaks. The shrub layer includes mountain laurel, flowering dogwoods, and American holly. There is also a young spruce. The herbaceous layer includes lowbush blueberry, bloodroot, trailing arbutus, partridgeberry, ferns, crested dwarf iris, downy phlox, pink lady slipper, jack-in-the-pulpit, pink turtlehead, trout lily, creeping phlox, harebell, Canada anemone, spiderwort, mayapple, and long-leaved houstonia as well as several grasses.³ A partial inventory of shrubs and wildflowers was prepared in 2004 and is appended to this plan.

Wildlife

Mammals visiting the site are likely to include typical suburban species including red fox, coyote, raccoon, woodchuck, skunk, squirrel, fisher, chipmunk, and white-tailed deer. There are no inventories of birds, reptiles, amphibians or insects.

Rare Species and Community Types, Exemplary Communities

The Massachusetts Natural Heritage Program does not list any rare species, community types, or exemplary communities at or near Cronk's Rocky Woodland.

Invasive Species and Control Options

There are a few occurrences of invasive plants – non-native species that are prone to spread and able to outcompete native species. These include English ivy, Vinca, Buckthorn, Norway maples, Honeysuckle, and Euwanamus. It would take very little ongoing effort to remove (physically pull) most of these, as there are so few.

¹ [The Geological Story of Wellesley](#), Katharine Fowler-Billings, Revised 1984

² [Soil Survey of Norfolk and Suffolk Counties, Massachusetts](#), (Peragallo, 1989)

³ [Walks in Wellesley](#), Margaret Klein Wilson, 1991

Human Context

History of Land Use

The area around Cronk's Rocky Woodland is shown as undeveloped woodland in the 1856 map of the Town of Needham (which then included Wellesley) as was most of the area between the Wellesley Square and the Worcester Turnpike. By the issue of the 1897 Atlas of the town of Wellesley much of the woodland had been subdivided into lots and many of the roads that now exist had been laid out although Crown Ridge Road was still not indicated. Population grew rapidly between 1890 and 1900 (40.9% increase) and much of the area around Cronk's Rocky Woodland was developed into single family homes during the decades after 1900. Mr. and Mrs. Cronk purchased their house site in 1927 and added to it over several years. While owned by Mr. and Mrs. Cronk the site was planted and tended as a native wildflower garden. The charming garden shed was built by Mr. Cronk and their son Casper in 1950.

Community Factors that Influence Management

As a result of its location in a neighborhood Cronk's Rocky Woodland does not get a lot of visitation. There are few places in Wellesley that provide such a diversity of flora and it could serve as an example of what others might do.

Current Use and Management

Current Management

For a number of years Cronk's Rocky Woodland has had a volunteer "Steward" who has looked after the property and helped to provide occasional public programs. The current Steward is Judith Boland an abutter who lives at 31 Summit Road. Judith and the prior Steward have maintained a binder with collected information about Cronk's Rocky Woodland. The following has been summarized from that "stewardship binder".

Management Recommendations/Actions 1999 to 2012

In 1999 Cathryn M. McDonough was hired by the WCC to inventory and propose some management steps for the property after what appears to have been several years of inactivity. She recommended the following:

Immediate Concerns

- Improve security of garden shed
- Move leaf shredder to shed
- Shred leaves before snowfall
- Treat shed roof for beetle damage

High Priority Tasks

- Keep trails clear and passable (excluding snow removal)
- Keep front strip looking neat
- Clear large branches from paths and beds
- Maintain and tend plants
- Remove non-native invasive plants
- Remove litter

Other Issues

- Consider having arborist look at trees for hazards
- Volunteer help
- Tools and supplies
- Reduce maintenance of grass strip in front
- Plant inventory
- Additional planting
- Lack of water
- Lack of electricity
- Poison ivy control
- Maintain a regular presence to ward off vandalism

She also recommended maintenance activities by season as follows:

Ongoing activities

- Prune woody plants, particularly dead wood
- Improve path (e.g., remove large rocks) and bed edging
- Label plants
- Update plant inventory

Fall

- Rake leaves from path and along grass strip in front
- Shred leaves for use the following spring
- Cut back herbaceous plants once they die back

Winter

- Remove large branches from path or beds
- Prune some woody plants
- Repair/maintain tools

Spring

- Rake leaves from cultivated beds
- Shred or haul away leaves
- Cut back dead growth of herbaceous plants from previous year
- Fertilize beds lightly with organic fertilizer
- Mulch cultivated areas with shredded leaves
- Install new plants

Summer

- Mow grass
- Weed beds and path
- Water plants

In 2002 she prepared a planting plan and additional maintenance recommendations. These are summarized below:

Tree-work

- Estimates from 2 arborists to remove hazards and remove some trees to reduce competition

Planting

- A list of proposed plantings with recommended locations and costs

Removal of invasive plants

- Volunteers had begun removing Vinca and English Ivy

In 2004 she resubmitted the planting plan prepared in 2002 noting that some progress had been made in removing Vinca and English Ivy and that some plantings had been installed in the Fall of 2003.

In January 2005 Ingrid Carls, the former site Steward, received a proposal from Tom Smarr a horticulturist with the New England Wildflower Society to manage the site based on the recommendation made by Cathryn McDonough. He estimated it would take an average of one day per month to do the recommended maintenance activities outlined above. A later note indicates that WCC allocated about \$2,500 per year to pay Tom Smarr. It appears that he did work until that Fall.

In November 2005 Ingrid wrote up notes of a meeting with Cathy Rooney. Those notes indicate that Ms. Rooney proposed to carry on the year-round maintenance work with the assistance of volunteers. No contract was finalized.

Volunteers installed a rain water collection system in 2006.

In 2008 Nancy Halpern began to be paid as the gardener to work with a team of volunteers to implement many of the recommendation proposed by Cathryn McDonough with a few other additions. In June of 2012 she reported the following:

Miscellaneous improvements

- Two compost bins
- New fence
- New plant labels
- Garden shed repairs
- Birdhouses
- New trail
- Trail improvements (removing some rocks)

Botanical additions

- Trees – Silver Bells & Rutgers' x-dogwood
- Shrubs – Fothergilla major & minor, Arnold's Promise Witchazel, *Ilex glabra* (3), Azalea (3), Rhododendron (1), and 1 Azalea and 1 Rhododendron salvaged from neighbors
- Wildflowers – Celandine poppy, Red Trillium, Jacob's ladder, *Phlox divaricate*, Columbine, Sundrops, Mountain mint, Cuckoo flower, *Lobelia siphilitica*, NE Fall aster, Boltonia, Black-eyed Susan, Goldenseal, Rattlesnake plantain, *Dicentra eximia**, Bunchberry, Wild strawberry, Jack-in-the-pulpit, Mertensia, Solomon's seal, Wild geranium
- Ferns – Ostrich, Royal, Sensitive, Maidenhair, Spinulose wood fern, Lady fern

Current management is being done primarily with volunteers under the supervision of the site Steward, Judith Boland. Nancy Halpern has expressed a desire to continue on as the gardener with the assistance of volunteers. There is an on-going concern about the sustainability of managing the site.

An open house flyer in 2009 mentioned that it costs an average of \$1,900/year to maintain Cronk's Rocky Woodland. The 2017 budget is \$500.

Education Programs

There are no regularly scheduled educational programs at Cronk's Rocky Woodland. There have been occasional advertised "open houses" in the Spring to encourage people to explore the site during the wildflower blooming season. Examples of flyers advertising these open houses are in the stewardship binder. In 2008 the WCC planted an Eastern redbud tree as a celebration for Arbor Day. There have also been occasional programs for volunteer groups and students.

The 1994 edition of Walks in Wellesley mentions a "Cronk's Rocky Woodland Nature Trail" brochure written by Connie Epstein. A copy of the brochure is included in the stewardship binder. The 9-page brochure identifies 7 "stations" or stops. Each stop has sketches and text that describe the nearby wildflowers, shrubs, and trees.

Public Use

Aside from the above mentioned occasional programs, Cronk's Rocky Woodland is open to the public from dawn to dusk and has occasional visitors walking the trails and enjoying the site.

Structures and Improvements

The 1950 garden shed is the only structure at Cronk's Rocky Woodland. There have been a number of improvements made to trails, fences, and plantings in the last several years as noted in the section on current management.

Stewardship Targets, Goals, Threats, Protection Strategies

Achieving a sustainable strategy for the stewardship of Cronk's Rocky Woodland is an overarching goal. The past several years illustrate some of the difficulty of maintaining the garden with a succession of paid workers and a very limited budget. Many of the recommendations made by Cathryn McDonough are still valid and are the basis for the following.

Stewardship Targets

- Ongoing control of invasive plants with seasonal work days (Spring & Fall)
- Ongoing clearing of poison ivy from program areas
- Ongoing programming events such as open houses in the Spring to encourage enjoyment of the site
- Experiment with program use of the garden shed
- Update the plant list (2017)
- Maintain plant diversity (supplement with native plants as needed)
- Continue volunteer Steward position as a 3 to 4-year commitment
- Develop revised nature trail brochure and make available on-line
- Label key plants (find labeling system)
- Prepare on-line nature guide (2017)

Goals

- Maintain the garden as a native wildflower display that can serve as an example for others and be enjoyed by Wellesley residents and others
- Establish baseline documentation
- Perform annual monitoring (neat appearance, trails, invasive plants, fences, garden shed, etc.) prior to work days
- Do at least two work days per year for clean-up and invasive plant control
- Host at least two programs per year

Threats

Terrestrial invasive plants do not pose a serious threat as of this report but should be monitored and controlled as appropriate.

Implementation Table

| | |
|---------------|--|
| Year end 2017 | <ul style="list-style-type: none"> • Baseline documentation |
| Fall | <ul style="list-style-type: none"> • Rake leaves from path and along grass strip in front • Shred leaves and compost for use the following Spring or remove • Workday |
| Winter | <ul style="list-style-type: none"> • Remove large branches from paths or planting beds • Prune deadwood from woody plants • Repair/maintain tools |
| Spring | <ul style="list-style-type: none"> • Workday • Rake leaves from cultivated areas of beds • Shred or haul away leaves • Fertilize beds lightly with organic fertilizer • Mulch cultivated areas with shredded leaves • Install new plants • Host open house(s) |
| Summer | <ul style="list-style-type: none"> • Mow grass • Weed beds and path • Water new plants |

Appendix

Cronk's Rocky Woodland – 2004 Plant List with Approximate Bloom Dates

(Nomenclature updated based on Wildflowers of New England by Ted Elliman 2016 when possible)

| Scientific Name | Common Name | Native (N) | Flowering Begins (approximate) |
|---|---|------------|--------------------------------|
| <i>Actaea pachypoda</i> | Wild baneberry, doll's eyes | N | 20- 26 May |
| <i>Actaea rubra</i> | Red baneberry, red doll's eyes | N | 20-26 May |
| <i>Actaea (Cimicifuga) racemosa</i> | Black cohosh | N | 1-7 July |
| <i>Anemone (Hepatica) acutiloba</i> | Sharp-lobed hepatica | N | 1-7 April |
| <i>Anemone (Hepatica) americana</i> | Blunt-lobed hepatica | N | 1-7 April |
| <i>Antennaria plantaginifolia</i> | Plantain-leaved pussy toes | N | 29 April – 5 May |
| <i>Aquilegia canadensis</i> | Wild columbine | N | 29 April – 5 May |
| <i>Arisaema triphyllum</i> | Jack-in-the-pulpit | N | 6-12 May |
| <i>Asarum canadense</i> | Wild ginger | N | 29 April – 5 May |
| <i>Asarum caudatum</i> | Western ginger | | 6-12 May |
| <i>Chimaphila maculata</i> | Spotted wintergreen | N | 15-21 July |
| <i>Chrysogonum virginianum</i> | Goldenstar | | 13-19 May |
| Chrysogonum virginianum "Allen Bush" | Goldenstar | | 13-19 May |
| <i>Cornus florida</i> | Flowering dogwood | | 29 April – 7 May |
| <i>Cypripedium acaule</i> | Pink lady's-slipper, moccasin flower | N | 20-26 May |
| <i>Dicentra cucullaria</i> | Dutchman's-breeches | N | 15-21 April |
| <i>Dicentra eximia "Alba"</i> | Fringed white bleeding heart | | 15-21 April |
| <i>Eurybia (Aster) macrophylla</i> | Large-leaved wood aster, large-leaf aster | N | Blooms in Fall |
| <i>Erythronium americanum</i> | American trout-lily, trout-lily, dog-tooth violet | N | 22-28 April |
| <i>Gaultheria procumbens</i> | Wintergreen, teaberry, checkerberry | N | July - August |
| <i>Geranium maculatum</i> | Wild geranium, spotted crane's-bill | N | 13-19 May |
| <i>Hydrangea arborescens "Annabell"</i> | Hydrangea | | July - August |
| <i>Hydrangea quercifolia</i> | Oak-leaved hydrangea | | 8-14 July |
| <i>Iris cristata</i> | Dwarf crested iris | | 13-19 May |
| <i>Ilex verticillata</i> (male) | Winterberry holly (male) | N | 17-23 June |
| <i>Ilex verticillata</i> (female) | Winterberry holly (female) | N | 17-23 June |
| <i>Jeffersonia diphylla</i> | Twinleaf | | 15-21 April |
| <i>Kalmia latifolia</i> | Mountain laurel | N | 3-9 June |
| <i>Kalmia latifolia "Sarah"</i> | Mountain laurel | N | 3-9 June |
| <i>Kalmia latifolia "Snowdrift"</i> | Mountain laurel | N | 3-9 June |

| | | | |
|--|--|---|---------------------|
| <i>Leucothoe axillaris</i> | Fetterbush, Coast doghobble | | 20-26 May |
| <i>Maianthemum canadense</i> | Canada mayflower, Wild lily-of-the-valley | N | May |
| <i>Maianthemum racemosum</i> | False Solomon's-seal | N | 20-26 May |
| <i>Maianthemum stellatum</i> | Starry false Solomon's-seal, Star flower | N | 13-19 May |
| <i>Mertensia virginica</i> | Eastern bluebells, Virginia bluebells | | 15-21 April |
| <i>Mitchella repens</i> | Partridge-berry | N | 10-16 June |
| <i>Phlox divaricate</i> | Wood phlox | | 13-19 May |
| <i>Phlox pilosa</i> | Downy phlox | | 27 April – 2 May |
| <i>Phlox stolonifera</i> (mixed cultivars) | Creeping phlox | | 13-19 May |
| <i>Podophyllum peltatum</i> | Mayapple, mandrake | N | 13-19 May |
| <i>Polemonium reptans v. villosum</i> | Jacob's ladder | | 6-12 May |
| <i>Polypodium sp.</i> | Rock polypody (fern) | N | NA |
| <i>Polystichum acrostichoides</i> | Christmas fern | N | NA |
| <i>Sanguinaria canadensis</i> | Bloodroot | N | 15-21 April |
| <i>Solidago caesia</i> | Axillary goldenrod, Blue-stemmed goldenrod, Wreath goldenrod | N | 26 August – 1 Sept. |
| <i>Tiarella cordifolia</i> | Foam-flower | N | 6-12 May |
| <i>Trillium grandiflorum</i> | Large-flowered trillium, white trillium, Showy trillium | N | 6-12 May |
| <i>Uvularia grandiflora</i> | Large-flowered bellwort | N | 29 April – 5 May |
| <i>Uvularia sessilifolia</i> | Sessile-leaved bellwort, Wild oats | N | 29 April – 5 May |
| <i>Viola labradorica</i> | Labrador violet, Dog violet, American dog violet | N | 29 April – 5 May |
| <i>Geum (Waldsteinia) fragariodes</i> | Barren strawberry, Appalachian barren-strawberry | N | 29 April – 5 May |
| <i>Xanthorhiza simplicissima</i> | Yellow-root | N | 29 April – 5 May |
| <i>Zizia aptera</i> | Heart-leaved alexanders | | 13-19 May |