

Stewardship Handbook

for the

Prospect Hill Park Stewardship Program

Prospect Hill Park, Waltham, MA

June 27, 2020



Prospect Hill Park
Waltham, MA 02452



Welcome and thank you for volunteering your time to join the **Prospect Hill Park Stewardship Program**. We've learned that proper Stewardship requires a commitment to ourselves, our city and our natural resources. Like any other community asset, open space must be managed. Your help and commitment to this worthwhile effort is greatly appreciated.

What is stewardship? In simple terms, stewardship means taking an active role in caring for land to ensure a more promising future for people, plants, and wildlife. Stewardship is an essential element of conservation.

I. About This Document

The purpose of this Handbook is to acquaint new Stewards to the policies, procedures, and programs that are applicable to members of the Prospect Hill Stewardship Program. The handbook is designed to:

1. Define the Prospect Hill Park Stewardship Program.
2. Outline the responsibilities of the Stewards.

We wish to acknowledge that part of this instruction has been adapted from the *Lexington Conservation Stewards Handbook*, 2005, written by Ery Largay, Lexington Conservation Assistant, Keith Ohmart, Lexington Stewards, Mike Tabaczynski, Lexington Stewards, and Tom Whelan, Lexington Stewards.

Adaptations were made by Ms. Sonja Wadman, Waltham Land Trust Executive Director, for the first training of volunteer stewards in Spring 2012. Adaptations were revised in Spring 2014, 2017, and 2020. Instructions have also been adapted from The Allen Parks Foundation in Allen Texas through their website, <http://allenparksfoundation.org/home.html>

Comments and suggestions for improving this handbook can be emailed to Ms. Wadman at swadman@walthamlandtrust.org.

II. Introduction

Prospect Hill Park (PHP) is the oldest city-owned park in Waltham, acquired in 1893. Encompassing 252 acres, it is also the largest city-owned park, maintained by City of Waltham's Consolidated Public Works Department (CPW) with oversight from the Recreation Board. PHP is a large, wooded area with dramatic topography containing two main summits. The higher summit, Big Prospect, is the second highest point in the vicinity of Boston, at 485 feet. The lower summit, which measures 435 feet, is known as Little Prospect. Both summits provide some of the best views of the Boston basin. PHP's trails pass through woodlands that include a variety of flora and fauna. The park also contains several vernal pools, which are protected wetlands. PHP is a passive recreation park used primarily for walking, hiking, nature watching and picnicking. There are picnic areas throughout the park that can be reserved for use through a city permit obtained through the City's Recreation Department, otherwise the picnic areas are available on a first come first serve basis.

Throughout the year, PHP attracts visitors and outdoor enthusiasts. During the Fall 2013, local citizens and the Waltham Land Trust (WLT) investigated the possibility of training volunteers to assist the City in maintaining PHP. In Spring 2014, that idea became a reality. In partnership with the City of Waltham's Recreation Department and full-time Ranger, the WLT is training volunteer stewards to serve as "Ambassadors" of the park. This Handbook is designed for them.

III. Stewardship Program Overview

The PHP Stewardship Program was established to enhance Prospect Hill Park by launching a collaboration between local citizens and the City of Waltham. PHP Stewards are volunteers who will serve as Stewards and Ambassadors for this open space. By their mere presence, PHP Stewards give a face to this public space and serve as a liaison between park patrons and the City of Waltham. Individuals ages 18 and older are welcome to join (younger folks require adult supervision).

A. Responsibilities:

During their time in the park, PHP Stewards serve as the eyes and ears for the park. Stewards identify maintenance concerns, report suspicious activity, serve as a resource to the general public, help to preserve the vitality and integrity of the park, greet visitors and help ensure a positive experience for all patrons.

Volunteers are asked to spend time in the park throughout the year and **report their findings**, ideas, issues, concerns on the **online** Field Report <https://www.city.waltham.ma.us/recreation-department/webforms/report-park-issues>. Find this on the Waltham Land Trust's website under **Projects>Volunteer Trail Stewards>Prospect Hill Park Trails**.

B. Basic Do's and Don'ts

DO

1. Visit your designated choice area of the park on a regular basis.
2. Visually inspect and ensure the trails, picnic areas, and other structures, are in good order.
3. Note any irregularities, cleaning, or maintenance issues. Remove minor trash and debris.
4. Identify and note areas of invasive plants. Remove if possible.
5. Keep pedestrian areas clear of small tree branches and debris.
6. Welcome all park visitors. Create an atmosphere of friendliness and stewardship.
7. Maintain a pleasant demeanor at all times. Act professionally.
8. When available, plan to participate in park activities and scheduled clean up days.
9. Call Waltham Police or 911 for any safety or health concerns.
10. Complete a Field Report to report maintenance and other issues.
11. Express your ideas and ask questions.
12. **HAVE FUN** and enjoy the Park. Your help is making it a better place for all.

DON'T

1. Don't perform maintenance that can cause you or anyone else risk or harm.
2. Don't rake trails; leaves and pine needles build soil, absorb water, and prevent erosion.
3. Don't try to open up an overgrown or blocked trail. Simply report this on the Field Report.
4. Don't build new trails, however small.
5. Don't mark or blaze trails.
6. Don't alter the trails in any way. Note any maintenance on your report.
7. Don't apply herbicides/pesticides anywhere in the Park. Note irregularities on your report.
8. Don't scold or reprimand bad behavior. Simply note the event in your field report.

C. What to Bring or carry with you

Be sure to dress appropriately for your time in the Park. You are representing the City of Waltham and the Prospect Hill Park Stewardship Program. Present a neat and professional appearance at all times.

Your own personal sunglasses, insect repellent, water, sanitizer, etc, are all essential items to carry with you during your time in the Park.

Keep extra trail maps within reach to distribute as needed.

Whenever possible, carry a wireless cell phone with you and the contact information of other Stewards, **Park Ranger (781-314-3452), CPW (781-314-3800), WLT (781-893-3355), Police non-emergency (781-893-3700), and Fire non-emergency (781-893-4105).**

We suggest you bring a notebook and phone/digital camera when you visit your site. (Only use your camera to take pictures where attention is needed in the park. Do not take pictures of

individuals visiting the park. Please respect their privacy). **Also bring WLT Steward business cards that you have personalized** to give to people wanting more information about the Stewardship Program.

D. What to Look For and Take Note Of

- Any unusual changes in natural or manmade features.
- Presence of unusual wildlife (you are not looking for just *problems*).
- Illegal activities, or evidence of such, particularly underage drinking, fires, operation of motor vehicles, hunting or trapping, shooting, and disposal of hazardous materials or pollutants.
- Evidence of trees and brush being cut in ways that are not proper trail trimming.
- Large deposits of trash or junk.
- Vandalism.
- Digging of holes.
- Any type of construction.
- Overgrown trails.
- Trails that are becoming progressively eroded or unsafe.
- Trails that are very wet or muddy outside the spring wet season (roughly March—April).

E. Dealing with Hazardous Materials (Hazmats)

Examples of familiar hazmats:

Household pesticides, fertilizers, paint, batteries, oil filters, oil tanks and containers, refrigerators, air conditioners.

These can generally be removed by Stewards if done carefully to prevent spillage. Otherwise, call the Park Ranger (781-314-3452) or CPW (781-314-3800) with questions. If fresh leakage is evident or if you are in doubt about what to do, mark and record the location of the item and contact the CPW department and/ or the WLT for follow-up.

If you encounter any unfamiliar materials or containers, **DO NOT** go near them. Mark and record the exact location and immediately contact the non-emergency Fire Department (781-893-4105) and the City's Recreation Department for follow-up.

F. Meeting Others

Stewards are the “front line” of the parks public outreach. You are very likely to encounter other visitors when walking the trails. Be as welcoming as possible. This type of face-to-face outreach is one of the best ways to encourage responsible behavior and reinforce public support of natural open space preservation.

G. “Irresponsible” Visitors

- Visitors acting irresponsibly usually respond positively if politely reminded that their actions adversely affect natural open space and its visitors. However, be aware of your own

safety at all times.

- DO NOT ARGUE OR ANTAGONIZE ANYONE. Simply refer them to the Park Ranger
- Don't approach anyone you feel might be threatening or dangerous. Move to a safe distance and discreetly contact Waltham Police (911 or 781-893-3700 nonemergency).

H. Follow Up

Carry trail guides and a notebook to take the contact information of people you talk to. Try to always follow up with them and ask if they are interested in joining the Prospect Hill Park Stewards, the Waltham Land Trust, or the stewardship effort in general.

I. HAVE FUN!

Enjoy your time in the park; others will feel the pleasure it brings you and join the movement!

IV. Important phone numbers and addresses:

For all emergency issues and concerns: *ALWAYS Dial 911!*

Important Phone Numbers:

Park Ranger	781-314-3452
Police non-emergency	781-893-3700
Fire non-emergency	781-893-4105
Waltham Recreation Board	781-314-3475
Waltham Consolidated Public Works	781-314-3800
Waltham Recycling	781-314-3390
Waltham Land Trust	781-893-3355

Important Addresses:

Prospect Hill Park Stewardship Program	walthamphp@gmail.com
Park Ranger E-mail	agreen@city.waltham.ma.us
Police/Fire Department (main)	175 Lexington St, Waltham
Hazardous Waste Facility	60 Hartwell Ave, Lexington
Waltham Land Trust website	www.walthamlandtrust.org

V. Organized Park Clean Up Events

At various times during the year, park clean up events will be coordinated with the City of Waltham to assist with maintaining the park. The information that follows is proper instruction for the Stewards who participate in these park clean ups.

Although not required, invasive Plant removal is part of regular stewardship activities and clean-up events **if you have been trained in plant identification and removal practices.**

The following sections are instructions on proper invasive plant removal and proper pruning techniques.

Removing Invasive Plants

Eradication efforts to control and eliminate invasive species requires careful planning in order to be successful. All efforts are labor intensive and time consuming. Some require repeated efforts over two or more growing seasons in order to be successful. Nevertheless, progress is possible and the work important in order to retain and expand the potential for native species to thrive. What follows is a brief overview of recommended procedures for a few of the most prevalent invasive species in Waltham.

Offsite Disposal

Species that cannot be left to decompose cannot be sent to public landfills or compost stations where they would regenerate and spread. To dispose of these plants:

1. Use thick black plastic bags.
2. If a reasonable number of bags of plants are collected, they can usually be distributed to volunteers to be left at the curb for weekly TRASH pickup one bag at a time.
3. If an impractical number of bags are collected, contact the DPW to arrange for the bags to be picked up *as trash, not compost* at the site.
4. If trash collection personnel refuse to take them, contact the DPW to arrange to deliver the bags to one of their trash dumpsters.

Oriental Bittersweet (*Celastrus orbiculatus*)



Oriental Bittersweet vine is the familiar vine with the attractive fall berries that open from orange to red as they ripen and are a sometimes favorite for creating eye-catching fall wreath displays. The vine itself, if left unchecked can eventually bring down trees and blanket an area with vigorous growth that covers everything in its path.

Young vines can be uprooted by hand with care to pull out as much of the root as possible. The uprooted vines can be dispersed in the surrounding underbrush to decompose. Return visits to the cleared area later in the season and for the following 2-3 years are necessary to determine if all root stock has been eradicated.

Older, woody plants that have succeeded in climbing nearby trees should be cut at the base. Cut the climbing vines up as high as you can reach, but leave the remaining vines that have climbed into the tree canopy in place as pulling them down will likely cause damage to the trees themselves. Disperse the cut vines in the adjacent undergrowth for decomposition. The root stock will re-sprout, often in the same season if cut before late summer/early fall. If cut in the fall, they will re-sprout the following season. Repeat visits are necessary to continue cutting back the new growth and eventually depriving the main rootstock of any ability to regenerate.

Garlic Mustard (*Alliaria petiolata*)



Garlic mustard is a biennial with first year plants setting small rosettes of leaves that lie close to the ground and are often unnoticed until much later in the season or over the winter when snow cover is light. It is the second year plants that raise their flower stalks to set seed and are most recognizable. While perhaps the easiest of our common invasive species to physically remove by hand, it can be one of the most frustrating to control in that its seeds remain viable for up to five years in the soil. The absolute key in tackling this species is to adopt a multi-year plan, returning each year to the same treatment areas for continued removal until all evidence of the plant is gone. Once a program of eradication of garlic mustard is begun in a given area, a commitment should be made to return to this area on an annual basis until there is no further sign of this species returning.

The best method to remove this plant is by hand removal in the spring from mid to late April until mid to late May. This is the time of year when pulling the plant by the roots is easiest as the soil is typically moist from spring rains. Once the plant has finished flowering and set seed, it is best to not disturb it as the seeds disperse very easily and can cling to clothes, shoes, etc, which will spread the seeds over a far wider area than if left alone.

The best method for hand removal is to grasp the plant at the base of the stalk and gently pull the roots from the ground. With practice, the whole root is easy to remove in most soils. Do try and pull the root even if the flower stalk breaks off, as the plant is often able to generate new growth from imbedded roots and finish its flowering and seed production cycle either later in the year or the following season.

When clearing an area, make every effort to remove every specimen visible. Leaving only a few plants will generate enough seed to repopulate a cleared area the following season. If first year growth plants are noticed during removal of the second year plants, it is often best to leave them until the following season. The root structure of the first year plants is not as robust, often resulting in removal of the leaf rosettes only, leaving the roots in the ground. Second year plants are far easier to remove in their entirety, roots and all.

Discard the entire plant, roots and all, in plastic garbage bags which should be sealed and disposed of either with your curbside trash pickup or if in large quantities, contact WLT to arrange for DPW disposal. Do not attempt to compost this plant, as its recuperative powers to finish its flowering cycle and generate seed are nearly miraculous.

Trimming and Pruning

The most important rule of thumb to observe in performing routine trail maintenance involving trimming or cutting of branches, etc., is to leave as little evidence in the form of visible cuts as possible. The end result of your endeavors should ideally be a trail that is free of protruding branches and looks as natural as possible. This is not always achievable, especially in areas with heavy brambles that must be sheared, but the overall goal should be to make the evidence of trimming as unobtrusive as possible.

The most frequently forgotten part of the trimming job is the removal of cuttings from the trail.

Why Pruning Technique Matters:

The pruning of limbs of woody plants must be done properly so that the cuts made heal correctly. Improper cuts, especially where limbs meet the trunk of the plant can lead to disease and the eventual weakening and death of the plant.

The area of the plant where the limb meets the trunk is called the branch collar. This is the zone where branch collar tissue develops from the branch ends towards the trunk, turning abruptly downward at the branch base. Trunk collar tissue develops later in the life of the branch, growing up and over the branch collar tissue. The branch collar is the zone where these two types of

tissue overlap. The branch bark ridge is the raised bark that develops in the branch crotch where the branch meets the trunk.

Proper pruning allows the trunk collar tissue to grow over the cut made, eventually walling off the living trunk tissue with a protective layer of bark. Cuts into either the branch collar tissue or the branch bark ridge tissue will not heal properly, allowing for disease organisms to enter the plant's trunk tissue leading to disease and premature death of the plant.

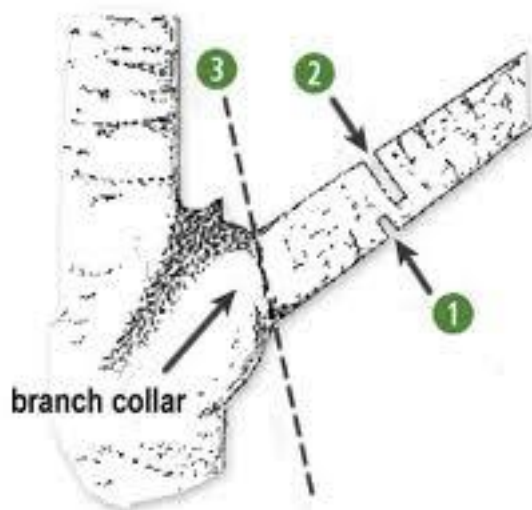
Proper Cuts

Cuts must be made *outside* of the branch bark ridge and branch collar area angling away from the trunk, but as close as possible to the collar.

There is no set or standard angle for a proper collar cut. Whether a branch collar is obvious or not, the final cut should:

1. Minimize the branch stub.
2. Leave the branch bark ridge and branch collar intact.
3. Minimize the overall size of the pruning wound.

Always stub cut the branch first. This technique uses a minimum of three cuts, the first two cutting off most of the branch but leaving a portion of 1-2' feet remaining for the final finish cut. This technique minimizes the chance of the bark tearing down the trunk, creating a wound that is difficult to heal.



1. The first cut undercuts the branch 1-2' out from the parent branch or trunk. A properly made undercut will eliminate the chance of the branch's peeling or tearing bark as it is removed.
2. The second cut is the Top Cut, which is usually made slightly further out on the branch than the undercut. This allows the branch to drop smoothly when the weight is released.
3. The third or finish cut is to remove the stub.

Each finish cut should be made carefully, outside of the branch bark ridge and branch collar areas, leaving a smooth surface with no jagged edges or torn bark.

Proper Timing

The ideal or optimal times to prune most woody plants are either late in the dormant season or well into the growing season, after leaves are fully formed and expanded. Cuts or wounds in certain species during the growing season may attract insects that carry diseases or allow fungus invasion. Avoid pruning woody plants undergoing bud break and early leaf expansion.