

Invasive Management Area - Site Plan 2021

Volunteer Leader's Name: Greg Sykes

Site Name: Royal Lake

Dates of Activity: January 1, 2021 to December 31, 2021

EXPECTATIONS FOR THE IMA PROGRAM VOLUNTEER LEADERS

Please read all of the following expectations and let us know if you are uncomfortable with any of the following.

IMA Leaders will:

- Manage the designated IMA area according to this SITE PLAN
 - All work shall be contained within the marked boundaries of the IMA site
- Recruit and directly supervise volunteers to complete work as specified in this SITE PLAN
 - All volunteers must sign in and will be under the direct supervision of the IMA Leader or the IMA Coordinator.
 - There will be no more than 20 volunteers on an IMA site at any one time, unless authorized by the IMA Coordinator
 - Volunteers should be at least 12 years old; if younger they must be accompanied by a parent or guardian. The IMA Leader may use their discretion and set the age limit higher if they wish.
- Schedule and lead 3-4 removal workdays, and a possible planting workday within the year. Submit these tentative dates at least three weeks in advance.
- Remove only invasive plants listed within this SITE PLAN and only according to methods specified in this SITE PLAN.
 - No volunteer is authorized to apply pesticides or herbicides
 - No volunteer is authorized to use power tools
- Monitor the IMA site at least once a month to identify natural resource management activities that may be required
- Report activities to the IMA Coordinator via the online Action Report
 - Workday Action Reports to be submitted by the following Tuesday.
 - Recruiting and monitoring Action Report hours to be submitted by the end of each month.
 - Monthly reports to be submitted at the end of each month, even if no action was taken.
- No IMA Leader or volunteer is authorized to be in the park before sunrise or after sunset
- This agreement does not authorize the removal of any material, debris, relic or other object from Park Property. If such relic is found, immediately report to the IMA Coordinator.
- Topography of the land shall remain as is, unless otherwise instructed to alter, this is to include but not limit approval to: terracing, creation of pathways or planting edges or borders
- Planting shall follow Park Authority rules and regulations; including but not limited to:
 - All vegetative planting requests to be approved by IMA Program Coordinator
 - Only native plant to be use as per policy 201

Park Name: Royal Lake

Description of site location: Newly expanded area includes Royal Lake Park, Pohick Stream Valley Park (east of Roberts Road to Royal Lake), Lakeside Park, Crooked Creek Park, and Kings Park West Park (see map for details). Parkland work in most cases is between residential property lines and roads. Work can be extended to other locations within Royal Lake with the permission of the IMA Coordinator.

Description of the site (size, slope, density of invasives, etc.): Topography, environment, and target species varies on exact location. List of target species begins further down on this page. Several of the targeted areas have had all of the English ivy or other non-native invasive species removed and are now at a monitoring stage. Several sites have had both nursery and rescue plants planted.

Your site is within an RPA. It is important to minimize ground disturbance. All vegetation removal must be done keeping with the minimum amount of soil disturbance. This site is required to have an RPA permit. The RPA permit only allows the removal of the species listed below.

Royal Lake Project Goals:

Pull and bag garlic mustard from the trails throughout the park in the spring. Follow up in these areas by rolling of ivy on the ground after spring ephemerals have died back. Be sure to shift piles occasionally to prevent re-rooting and pull any plants that have rooted. Monitor and remove re-sprouts within previous areas worked. Other targeted species are then to be removed from specified areas. Record whether time is spent within the original site or in the extension in the action reports (monitoring & work). Continue to monitor tree plantings; remove deteriorating tree shelters from plantings. Oversee a spring or fall planting if needed. Monitor encroachments.

If found; you have permission to remove these invasive species from within your IMA site:

Asian Wisteria	Oriental Bittersweet
Autumn Olive	Pachysandra
Bradford Pear	Periwinkle
Bush Honeysuckle	Porcelain Berry
English Ivy	Princess Tree (seedlings)
Garlic Mustard	Privet
Japanese Barberry	Rose of Sharon
Japanese Holly	Russian Olive
Japanese Honeysuckle	Wavyleaf basketgrass
Japanese Stilt Grass	Winged Burning Bush
Kudzu	Wineberry
Mile-a-Minute	Wintercreeper
Mimosa	Yellow Archangel
Multiflora rose	

The following species-specific techniques and timing of treatment are approved for work at your site. Please note time of year as well as preferred method. There are alternate methodologies mentioned for some species, if these are to be used they are so stated in your highlighted individual Project Goals.

Asian Wisteria *Wisteria floribunda* and *W. sinensis*

- Spring – October. Only cut vines that are climbing into the tree canopy. Cut vines both at ground level (do not leave stumps) and at least six feet above ground level.

- Do not remove root material unless specifically directed due to extensive root system and possible damage to the habitat.
- Cut sections of vine can be cut into small pieces (1-2 feet) and left on site.
- *Note: Hand removal does not work; do above work only to access other invasive species for removal.

Autumn Olive & Russian Olive *Elaeagnus umbellata* and *E. angustifolia*

- Year-round. Pull young seedlings after a rain and before they produce seeds. Use weed wrench or pitchfork to remove entire root since broken fragments may re-sprout. If too big to pull, remove flowering branches, but avoid cutting shrubs to ground as this will encourage re-sprouting.
- Plant material must be bagged and removed off site due to allelopathic tendencies.
- Please note location on action report to IMA Volunteer Coordinator.

Bradford Pear *Pyrus calleryana*

- Year-round. Pull young seedlings after a rain and before they produce seeds. Use weed wrench or pitchfork to remove entire root since broken fragments may re-sprout. If too big to pull, remove flowering branches, but avoid cutting shrubs to ground as this will encourage re-sprouting.
- Plant material can be cut into small pieces (1-2 feet) and left on site.
- Fruit need to be bagged and removed from site.
- Please note occurrence and location of large trees (those greater than 1” dbh - dbh is measured 4’ from the ground) on action report to IMA Volunteer Coordinator.

Bush Honeysuckle *Lonicera sp.*

- Year-round – Pull young seedlings after a rain and before they produce seeds. Use weed wrench or pitchfork to remove entire root since broken fragments may re-sprout. If too big to pull, remove flowering branches.
- If shrub honeysuckle has solid stems, stop, and report to IMA Volunteer Coordinator – native shrub honeysuckles, although rare, can occur in our area.
- Avoid cutting shrubs to ground as this will encourage re-sprouting.
- AVOID cutting in winter as it encourages most vigorous re-sprouting.
- Plant material must be bagged and removed off site due to allelopathic tendencies.

English Ivy *Hedera helix*

- Year-round. Cut vines growing up trees or other vertical surfaces. At ground level, pull up as much root system as possible. Cut vines around the entire tree above head height, if possible, or at least two feet above the ground. To avoid dust and debris in eyes do not pull vines growing above head-height. Ivy on the ground may be rolled up like a carpet.
- Plant material should be bagged for removal off-site.
- *Note: If ivy is still growing on site, it may be possible to place cut vegetation on top of growing ivy, see project goals for more details.

Garlic Mustard *Alliaria petiolata*

- Spring. Once flowers form, pull, bag and remove from site. Alternate method: cut flowering stalks from plants leaving root material in place. If plant is in seed, be very careful in removal, as it is very easy to spread the seed at this stage.
- Plant material must be bagged and removed off site due to allelopathic tendencies and high degree of seed viability (even unripe seed will ripen if left on site).

Japanese Barberry *Berberis thunbergii*

- Year-round. Pull young seedlings after a rain and before they produce seeds. Use weed wrench or pitchfork to remove entire root since broken fragments may re-sprout. If too big to pull, remove flowering branches, but avoid cutting shrubs to ground as this will encourage re-sprouting.

- Plant material should be bagged for removal off-site.
- *Note: If no fruit is present, it may be possible to place cut vegetation, root side up (if roots present) in the plot, see project goals for more details.
- Please note occurrence and location on action report to IMA Volunteer Coordinator.

Japanese Holly *Ilex crenata*

- Year-round. Pull young seedlings after a rain and before they produce seeds. Use weed wrench or pitchfork to remove entire root since broken fragments may re-sprout. If too big to pull, remove flowering branches, but avoid cutting shrubs to ground as this will encourage re-sprouting.
- Plant material should be bagged for removal off-site.
- *Note: If no fruit is present, it may be possible to place cut vegetation, root side up (if roots present) in the plot, see project goals for more details.

Japanese Honeysuckle *Lonicera japonica*

- Year-round. Cut vines growing up trees or other vertical surfaces above head height, if possible, pull up as much root system as possible.
- Plant material should be bagged for removal off-site.
- *Note: If no fruit is present, it may be possible to place cut vegetation, root side up (if roots present) in the plot, see project goals for more details.

Japanese Stilt Grass *Microstegium vimineum*

- June – August. Pull young sprouts and deposit in a single pile on site until seed set (September)
- After seed set (September), material must be bagged and removed from site.
- *Note: This plant is an annual – early removal of sprouts will stimulate seed bank and more will germinate (this is a good thing), as you can remove two seasons of seeds in just one season.

Kudzu *Pueraria montana*

- Spring – October. Cut a “window” in vines. Cut vines growing up trees or other vertical surfaces above head height, if possible, pull up as much root system as possible.
- Cut sections of vine can be cut into small pieces (1-2 feet) and left on site.
- Seed and flowers should be bagged for removal off-site.

Mile-a-Minute *Polygonum perfoliatum*

- May-July. Pull young sprouts. Thorns are not as painful earlier in the season.
- Deposit in a single pile on site until seed are formed.
- August-September; after seed set, debris must be bagged and removed from site.
- *Note: This plant is an annual – early removal of sprouts will stimulate seed bank and more will germinate (this is a good thing), as you can remove two seasons of seeds in just one season.

Mimosa *Albizia julibrissin*

- Spring – October. Pull young seedlings after a rain and before they produce seeds.
- Debris must be bagged and removed from site.
- Please note occurrence and location of large trees (those greater than 1” dbh - dbh is measured 4’ from the ground) on action report to IMA Volunteer Coordinator.

Multiflora rose *Rosa multiflora*

- Spring - October –Branches cut back to the crown. Cut back the same plants three times in one growing season.
- Plant material can be cut into small pieces (1-2 feet) and left on site.
- Rose hips need to be bagged and removed from site.
- October – Spring. Rose dies back to the root system; focus on removing the root system.

Oriental Bittersweet *Celastrus orbiculata*

- Spring – October. Only cut vines that are climbing into the tree canopy. Cut vines both at ground level (do not leave stumps) and at least six feet above ground level. Vines will re-sprout from the roots, so repeatedly cut in the same area of the IMA site over the course of a single season. Fruit will appear in June but will not be viable until October.
- November-January. Only if fruit present, so identification is positive, can continue removing vines until mid-winter.
- Cut sections of vine can be cut into small pieces (1-2 feet) and left on site until September.
- Cut sections of vine with fruit should be bagged and removed from site (September-January).
- Root material should be bagged year-round and removed from the site to avoid resprouting.

Pachysandra *Pachysandra terminalis*

- Year-round. Pull entire plant and root system.
- Bag pachysandra and remove off-site.
- *Note: If pachysandra is still growing on site, it may be possible to place removed vegetation on top of growing pachysandra, see project goals for more details.

Periwinkle *Vinca minor and V. major*

- Year-round. Pull entire plant and root system.
- Bag periwinkle and remove off-site.
- *Note: If periwinkle is still growing on site, it may be possible to place removed vegetation on top of growing periwinkle, see project goals for more details.

Porcelain Berry *Ampelopsis brevipedunculata*

- Spring – December. Cut vines both at ground level (do not leave stumps) and at least six feet above ground level (for vines that are climbing). Vines will re-sprout from the roots, so repeatedly cut the same vines over the course of a single season. Fruit will begin to appear in June, but will not be viable until September.
- Cut sections of vine can be cut into small pieces (1-2 feet) and left on site Spring-August, bagged and removed after fruit appears.
- August-December. Only remove if fruit present, so identification is positive, can continue removing vines until mid-winter.
- Root material should be bagged and removed from the site year-round to avoid resprouting.

Privet *Ligustrum sinense and L. vulgare*

- Year-round. Pull young seedlings after a rain and before they produce seeds. Use weed wrench or pitchfork to remove entire root since broken fragments may re-sprout. If too big to pull, remove flowering branches, but avoid cutting shrubs to ground as this will encourage re-sprouting.
- Cut branches should be bagged for removal off-site.
- *Note: If no fruit is present, it may be possible to place cut vegetation, root side up (if roots present) in the plot, see project goals for more details.

Rose of Sharon

- Year-round. Pull young seedlings after a rain and before they produce seeds. The entire root must be removed since broken fragments may re-sprout. If too big to pull, remove flowering branches, but avoid cutting shrubs to ground as this will encourage re-sprouting.

Royal Princess Tree

- Year-round. Pull young seedlings after a rain and before they produce seeds. The entire root must be removed since broken fragments may re-sprout. If too big to pull, remove flowering branches, but avoid cutting shrubs to ground as this will encourage re-sprouting. Please note occurrence and location on action report to IMA Volunteer Coordinator.
- Anything over 1" dbh to be removed by FCPA forestry crew.

Tree of Heaven *Ailanthus altissima*

- Spring – October. Pull young seedlings after a rain and before they produce seeds.
- Debris must be bagged and removed from site.
- Please note occurrence and location of large trees (those greater than 1” dbh - dbh is measured 4’ from the ground) on action report to IMA Volunteer Coordinator.

Wavyleaf basketgrass

- Year-round. Pull entire plant and root system. Pull young sprouts and deposit in a single pile on site until seed set (mid-summer); after seed set, all material must be bagged and removed from site. Extra caution should be taken to decontaminate clothing and shoes if site is visited seeds have set.

Winged Burning Bush *Euonymus alatus*

- Year-round. Pull young seedlings after a rain and before they produce seeds. Use weed wrench or pitchfork to remove entire root since broken fragments may re-sprout. If too big to pull, remove flowering branches, but avoid cutting shrubs to ground as this will encourage re-sprouting.
- Cut branches should be bagged for removal off-site.
- *Note: If no fruit is present, it may be possible to place cut vegetation, root side up (if roots present) in the plot, see project goals for more details.

Wineberry *Rubus phoenicolasius*

- Spring - September –Branches cut back to the crown. Cut back the same plants three times in one growing season.
- Plant material can be cut into small pieces (1-2 feet) and left on site.
- After September - Wineberry dies back to the root system; focus on removing the root system.

Wintercreeper *Euonymus fortunei*

- Year-round. At ground level, pull up as much root system as possible. For climbing vines, cut above head height, if possible, or at least two feet above the ground; cut vines around the entire tree. To avoid dust and debris in eyes do not pull vines growing above head-height. Wintercreeper on the ground may be rolled up like a carpet.
- Wintercreeper should be bagged for removal off-site.
- *Note: If Wintercreeper is still growing on site, it may be possible to place cut vegetation on top of growing wintercreeper, see project goals for more details.

Yellow Archangel *Lamium galeobdolon*

- Year-round. Pull entire plant and root system.
- Bag archangel and remove off-site.
- *Note: If archangel is still growing on site, it may be possible to place removed vegetation on top of growing yellow archangel.

Cut and/or pulled vegetation will be: Removed from site, bagged and piled along the road for normal trash pick-up or support staff removal. Workdays must be scheduled three weeks in advance to ensure timely pick up of bagged debris.

Notes: Resource Protection Areas fall under the protection of the Chesapeake Bay Protection Ordinance. As per the ordinance, vegetation may only be removed when it is causing harm to the stream buffer. When working in an RPA, remove vegetation at ground level, pulling roots only when necessary.

Neither the IMA leader nor any volunteer has authorization to use herbicides or power tools on parkland.

The Site Leader must notify FCPA of all planned workdays three weeks prior to work. This assists us in recruiting volunteers as well as notifying park neighbors, park users and staff that will be required to pick up debris.

Action Reports to be filed by the following Tuesday after workdays and by the end of the month for compiled monitoring, training and recruiting hours, as well as non-action monthly reports. Volunteer sign in sheets are to be mailed or FAXed to the IMA Coordinator at the end of each month.

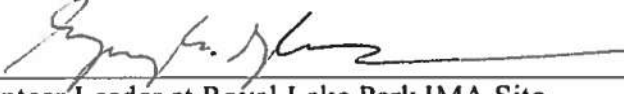
You do not have permission to remove anything not on the target list.

Other trash: It may be useful to also complete a trash pick up. Keep trash and vegetative debris separate and deposit it in the location for the debris to be removed.

Tools Borrowed			
<u>Tools</u>	<u>Number</u>	<u>Tools</u>	<u>Number</u>
Bow Saw	0	Mattocks	0
Bucket	2	Pruners	2
Hand Jab Saws	4	Shovels	0
Hand Folding Saw	6	Weed Wrench	3
Loppers	1		

I understand that I must account for and return the tools listed above to the Fairfax County Park Authority when my activity at this site ceases, or by December 31, 2021, whichever comes sooner.

I understand that certain species respond more efficiently to pulling or cutting at certain times of the year. I will only remove permitted species from my IMA site, in accordance with the general overall IMA Program plan. In order to protect sensitive resources, I also understand that pulling or digging of invasives will not be allowed on certain sites. I will share this information with all of my volunteers. If one of my volunteers does not follow these rules, I will ask them to leave the site. I will be on site to supervise all work at my IMA site at all times. I will submit the necessary action reports when due. I understand if I cannot follow this agreement, my permission to work on parkland will be revoked.


3/15/2021

Volunteer Leader at Royal Lake Park IMA Site Date


4/1/2021

Authorized Representative Fairfax County Park Authority Date