IMA Celebrates 10 Years at Royal Lake: the Good, the Bad, and the Ugly

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Note: This interactive article is best read electronically at www.grsykes.com/pdf/eco-articles/75 2017-06.pdf, enabling access to the hyperlinks.

Invasive Management Area (IMA) volunteers have been busy pulling non-native invasive weeds from Royal Lake Park and connecting Fairfax County Park Authority (FCPA) land over the past 10 years! This program specifically sets its sites on plants from other countries that escaped cultivation, and, without predators, parasites, and diseases keeping them in check, thrive better here than in their homeland. To quell these weeds' proliferation, FCPA grants IMA site leaders permits to remove solely the target species by hand or with hand tools: only FCPA contractors are authorized to use power tools and herbicides in parks. FCPA actually started IMA in 2006, and Royal Lake joined the efforts in the second of a two-year pilot program. By 2008, that successful trial at 40 countywide sites secured IMA into a permanent program within FCPA's Natural Resources Division.

IMA within Royal Lake's watershed kicked off with English ivy eradication from a half-acre plot. Saving and restoring this site was a priority because of its mature woodlands, featuring century-old oak trees and rich understory. Historically, this section remained forested even when the rest of the area was farmland. The initial ivy clearing took a year and a half, followed by replanting with native species, monitoring to hit English ivy remnants and any other non-natives trying to colonize, and surveying by biologist teams, who gave high kudos to the recovery here.





Figure 1. English ivy carpeted Royal Lake Park's first IMA site (A). This photograph shows untouched ivy groundcover. Ivy windows cut on trees killed the vines on the trunks. Ten years later (B), this plot is free from English ivy and all other IMA targets. The work saved mature trees and enabled mayapples, spring beauties, trout lilies, New York ferns, mapleleaf vibernum, wild blueberries, American euonymus, and other native species to return and proliferate.

Since that first site, IMA volunteers purged eight other major English ivy patches, countless other small English ivy clusters, three dense <u>oriental bittersweet</u> infestations (including several acres in Crooked Creek Park), and <u>porcelain-berry</u> and <u>Chinese wisteria</u> near the western lake shore. Every spring, <u>garlic mustard</u> workdays clear the flood plains of this weed, whose seeds can survive at least 10 years in the soil before germinating. Many of the other IMA-targeted species appear on the <u>short list</u>. Some of these plants, such as <u>mile-a-minute</u> and <u>Japanese stiltgrass</u>, were accidently released. Others, like <u>autumn olive</u> and <u>Amur honeysuckle</u>, were actually endorsed as bird food before their detrimental nature became apparent.

Through IMA, the parks gain from habitat restoration and a vibrant native ecosystem. For people only out exercising, less vegetation clogs trails since the targeted, fast-growing weeds frequently overgrow the paths and woodlands alike. The IMA workforce ranged from nearby neighbors to travelers outside of Fairfax County. Many groups helped IMA, such as AmeriCorps, churches, and high school and college classes. Boy Scouts and Girl Scouts often support the IMA cause, with Mohh Gupta being the most

recent candidate to earn his Eagle Scout for leading workdays last summer at Crooked Creek Park. The vast workforce demographics range from 12-vear-olds to senior citizens and encompass every race, major religion, many ethnic derivations, and different political affiliations. IMA at Royal Lake now has four full site leaders, who lead groups in workdays, and one IMA Lite leader who works solo or with neighbors—more than some other county districts! Sponsors unable to physically work the woodlands still recruit or donate small gifts to raffle after the sessions.

The IMA program educates about non-native invasive plant species and healthy land stewardship. At the end of workdays, volunteers often comment how much they learned. For folks missing an outdoor event, Eco-Articles, like the one you are reading now, keeps the public informed. These pieces introduce different environmental concepts, such as habitat islands, wildlife corridors, soil structure, native gardening, and riparian buffers. Q/A sessions address reader inquiries from plant identification to "the deal with poison ivy." Keeping both the environment and humans healthy are reoccurring themes, ranging from ridding nonnative plants associated with Lyme disease to mosquito control without noxious sprays, responsible dog etiquette, and general parkland management philosophies.

If IMA's success is "the Good," then "the Bad" is damage occurring to natural areas from <u>air pollution</u>, poor land use causing <u>erosion</u>, and <u>watershed contamination</u>. <u>Neighbor encroachment</u> is illegal, destroys habitat, introduces invasive weeds



Figure 2. Most of the parkland encroachment involves <u>dumped</u> <u>yard debris</u>. Native ferns populated this steep slope and helped prevent erosion, but only a portion of it remains (right side). Neighbors dumping branches, grass clippings, and other yard waste (left side) killed beneficial plants, destroyed their soil-retaining properties, and introduced garlic mustard here.

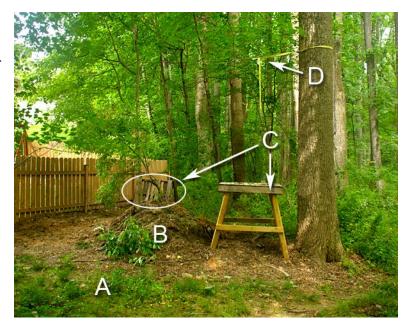


Figure 3. A more audacious encroachment contains A) cleared areas or mowed lawns, B) composting operations, C) furniture or other structures, and D) recreational equipment (present here is a zip line—a FCPA liability). Furthermore, this encroachment is next to Shanes Creek, falling within a sensitive Resource Protection Area (RPA). Other Royal Lake watershed intrusions involve outdoor fireplaces, pavement, extended fence lines, gardens, and/or running underground drainage systems and electrical wires into natural parks.

into woodlands, and adds excessive chemicals and nutrients that pollute the land and waterways. As IMA often works closely with watershed efforts, cleanup volunteers frequently express frustration over polluters. Understand that we were all born immature and ignorant, yet most of us matured and learned. Trash harms everyone in the long run, so deliberately dumping garbage in the street or leaving it scattered, especially within sight of a trash can, is more than lazy, it is simply stupid. Since there will always be people like that, the good folks need to step up and compensate for the careless. Sometimes the unseen biohazardous or chemical waste causes more damage than the obvious garbage. While most citizens applaud the cleanups, some of these same folks cause contamination through their property



Figure 4. Lakeside Park's unrecognizable junipers, overtaken with oriental bittersweet, porcelain-berry, Japanese honeysuckle, and multiflora rose, epitomize "the Ugly" and the work still ahead.

maintenance. Friendly reminder: the synthetic lawn treatments also pollute with toxic chemicals and excessive nutrient runoff. Achieve healthy lawns and gardens organically. Leaving pet poop anywhere but a trash can contaminates the environment with nitrogenous waste and pathogens—besides being rude and disgusting. How to behave in parks is best summarized by the adage, "Take only pictures. Leave only footprints."

The weedy tangles still out there are "the Ugly." Even if the parks eradicated every target, the invasive species can still reenter through though many sources. Weedy strongholds (e.g., on private property, schools, and VDOT land) become seed-spewing and/or rhizomerunning factories from which these alien invaders spread. Case in point, check out the Japanese honeysuckle, English ivy, bamboo, wisteria, and oriental bittersweet overrunning Roberts Road's unkempt roadside between Collingham Drive and New Guinea Road.

Whereas humans brought over what became IMA targets, humans are now the

salvation to prevent these non-native weeds from exponentially spreading. The number of IMA volunteers working in FCPA parks grows each year. Folks working at IMA sites learn critical concepts that they take back and apply to their homes. Everyone benefits from IMA—people and wildlife alike.

Come and see IMA's impact for yourself! To celebrate IMA's 10th Year at Royal Lake, I will host a nature walk on Saturday, June 24, 2017, from 9:00-11:00 a.m., where we will examine habitats ranging from healthy parkland to invasive plant infestations. IMA sites visited vary from completed to untouched. We will discuss IMA strategy, plant identification, and pressures on the parklands. Participant ages are 14+ years old. Dress for the weather (rain or shine; postponed for thunderstorms) and wear sturdy shoes or boots. Bring your questions! To keep the group small enough so everyone can see and hear, please RSVP for a limited slot at www.SignUpGenius.com/go/30E0A4FAEAF2CAAFE3-imanature. See you in the field!

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