

IMA Program and Riparian Buffers

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The Invasive Management Area (IMA) program has identified its next [English ivy](#) site at Royal Lake Park. At this site over the past two years, volunteers killed only the vines that threatened trees, so we are expanding: this year, we will also eradicate the ivy groundcover here. There has not been a workday this year, in part because the frozen ground prevents roots from being pulled.

As we wait out the winter weather, we evaluate the site and make plans for the next season, including getting the necessary permits. Our work in the park is governed by a Resource Protection Area permit. This permit is designed to minimize soil and vegetation disturbances along streams in order to protect water quality. It underscores the importance and fragility of riparian buffers and is additional to the already received primary permit to remove invasive plants within portions of the park. The word “riparian” refers to habitats around flowing water, such as the many streams and rivers snaking throughout Northern Virginia. Even though we frequently encounter these features, they remain extremely sensitive to physical pressures (erosion), chemical stresses (pollutants contaminating wildlife, especially sensitive aquatic life), and biological threats (fecal bacteria, diseases, invasive wildlife such as snakeheads, and spreading invasive plant seeds along banks). For these reasons, buffer protection zones are established to protect aquatic areas from human activity. For people working in riparian areas, special land use training and permits must be obtained before any potentially land-disturbing work may commence—including FCPA-sanctioned IMA activities.

Many people love nature and happily support conservation efforts that maintain riparian buffers and wetlands. Other folks might not have streamside flora directly on their priority list. However, we all need clean water. Right now, tap water is fairly affordable, in part because prior to reservoir water reaching the treatment plant, native plants already scrubbed the water of many artificial impurities and controlled erosion. Nature did the bulk of the work free of charge while slowly releasing groundwater reserves! In contrast, we now see at the Royal Lake Dam how much human engineering, labor, and money (a \$2.5 million price tag) are required to replicate some of nature’s functions. Dams like Royal Lake are merely an artificial solution to soil stabilization, in this case providing a wonderful retention pond. While the dam spillway project must be completed for the safety of downstream residents, it illustrates the effort needed in soundly channeling water with erosion countermeasures. Can you imagine the expenses if people were to completely undertake the jobs of the riparian buffers? The funding would inevitably come from taxpayers. Even if we paved waterways with erosion-combating concrete (common in Southern California, also seen along portions of Cameron Run paralleling the Beltway in Alexandria), we still are faced with contaminants in runoff. The lack of absorption then escalates the effects felt by floods and droughts. Bottom line: by preserving native buffer zones, everybody wins.

Riparian systems and spillway renovations were two of the subjects IMA volunteers examined during a February nature walk around Royal Lake. The volunteers had a first-hand, wintertime look at wetland and dry forest ecosystems. This seasonally different perspective enabled participants to identify dormant plants by clues in the bark, buds, branch formation, and even dry leaf and fruit remnants. Some plants, such as the crane fly orchid (*Tipularia discolor*), display foliage only in winter (then flower during the summer), whereas others, such as spring beauties (*Claytonia virginica*), are early spring ephemerals and are now sprouting leaves in preparation for springtime blossoms.

On May 2, 2009, Fairfax County will partake in the first state-wide Invasive Plant Removal Day, hosted by the Virginia Master Naturalists and the Virginia Native Plant Society. Volunteers at Royal Lake Park will target garlic mustard, multiflora rose, and several other species. It will be a family-oriented workday, where participants learn about the habitat and parent-children teams pull weeds! On this day only, the usual age limit is lowered to 7 years old, but children aged 7-12 years must be accompanied by a parent. The fun runs from 7:00 a.m. through 9:00 a.m. for young family events, followed by additional work time through 11:00 a.m. for teenagers and adults. To join this IMA workday or get on the Royal Lake IMA distribution list, contact me. Remember, some IMA workdays, nature walks, and other opportunities are only announced via e-mail, so sign up today at greg@grsykes.com! Contact the KPW Parks & Lake Committee (parks@kpwca.org) for additional Royal Lake stewardship events.

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