

HSMC Strategy for Invasive Plant Management

HSMC was first surveyed for invasive species in 2000 as part of a St. Mary's College Student's Senior thesis (see "A Survey of Invasive Exotic Plant Species in Historic St. Mary's City," by Corita Jones, May 2000).

Although efforts have been made to control these species over the years, most of the identified plants remain in some degree. The most problematic at the present include Japanese Honeysuckle (*Lonicera japonica*), Paper Mulberry (*Broussonetia papyrifera*), English Ivy (*Hedera helix*), Beefsteak plant (*Perilla frutescens*), Common Privet (*Ligustrum vulgare*), Sweet Autumn Clematis (*Clematis terniflora*), Chinese yam (*Dioscorea oppositifolia*) and Periwinkle (*Vinca minor*).

It is our intention to manage the land of HSMC, much of which falls in the Critical Area, in such a way as to encourage existing native vegetation. Another goal is to re-introduce species that were probably part of the 17th-century flora, as evidenced in the pollen record, extant herbarium specimens, and contemporary accounts. By so doing, we hope to re-create, as far as possible, the community of plants that greeted the first colonists.

Unchecked growth of the invasive exotic species will not only degrade our existing native plant communities, but also hinder reintroduction efforts.

We are following several avenues of control. All activities will be carried out with as little soil disturbance as possible. This is preferable not only to prevent erosion, but also to protect archaeological resources.

The first method is hand removal. This can be accomplished with shallow rooted young specimens, annuals, and to a large extent with the vines. Volunteers, especially from St. Mary's College, have been very valuable partners in this effort. We own a "Weed Wrench" which also allows mechanical removal of small trees and shrubs.

In areas of dense growth, we have employed a couple of different methods. We have hired goats (www.eco-goats.com). They were successful in reducing the mass of plant material. But we did need to follow up with machinery (bush-hog) and hand removal of vines from trees. They are an expensive option, unless a local herd can be employed. They are also indiscriminant eaters, so valuable plants need protection. (see the file labeled "Goats"). They may be the best alternative for Key Swamp, provided the Critical Area Commission will grant approval.

We have also employed herbicide. For major spraying, we have hired Mark Smith, Maryland Department of Agriculture. This was also effective to a degree, although removal of dead material was still required in certain places. By partnering with the college, we are able to get this done at a very reasonable cost.

A Public Agency Pesticide Applicators Certification is needed to apply any herbicide on HSMC property.

Fortunately, one of the worst invasive species, Multiflora rose, is being impacted by Rose Rosette disease. Many of the plants on site are dying out. Unfortunately the arbor roses have also been affected.

Once an area is cleared of invasives, native species should be planted as soon as possible.