

## What are we doing?



**Helping Our Land Heal: A Natural Capital Stewardship Model** is a cooperative pilot study sponsored by the Fairfax County Park Authority to transform an unhealthy forest, impacted by many stresses, into a healthy self-sustaining ecosystem.

The Helping Our Land Heal study is being piloted at Ellanor C. Lawrence Park (ECLP) in Chantilly. ECLP staff and the county's Resource Management Division are busy with restoration activities. As you visit the park, notice signs that indicate hard work in many parts of the park. Here are some of the projects:

### Why are staff pulling green plants out of the woods?



An MA volunteer works on a field of invasive Garlic Mustard.

Staff and volunteers are pulling non-native invasive plants. Invasive plants are usually non-native species that cause ecological or economical harm. They share certain characteristics, such as being able to grow quickly, generate many offspring and tolerate a wide range of habitats. For instance, Japanese stilt grass will produce seed in as little as 1% sunlight!

**Why does the forest smell burnt?** Part of managing a forest is using a tool called a prescribed burn. In meadow and forest ecosystems, fire is a highly effective method for promoting good quality native habitat, limiting or eliminating invasive plant species and reducing the risk of unplanned fires.

**What are those fenced-in areas deep in the forests?** These areas are called deer *exlosures*. This tool helps measure forest growth when not impacted by deer foraging. Over time, comparisons between this area and the surrounding forest will give important information about the forest management tools.

**Why are there controlled hunts in the park?** When there are too many deer, the environmental impact on a forest can be devastating. A single adult deer consumes 5 to 7 lbs. of plant matter in one day. Over 1 ton of vegetation is consumed by one deer in one year. A healthy forest has 15 to 20 deer per square mile, but some areas of Fairfax County have as many as 100 deer per square mile!



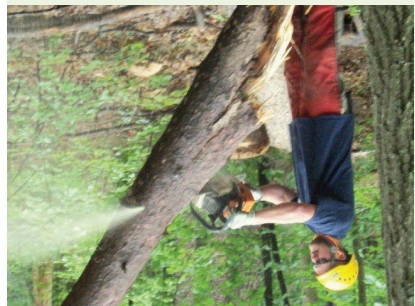
These stations help stop the spread of non-native invasive plant species such as Japanese stilt grass, wayleaf basketgrass, and garlic mustard by removing unwanted seeds from the soles of hikers' shoes and boots. Please use these stations before you head into the forest and when you leave.



### What are those boot brush stations and how do they help?

Overpopulation causes damage to native plants and trees as stems, buds, lower leaves and seeds are all eaten by hungry deer. This reduces food and shelter for other animals, resulting in fewer species and an overall loss of biodiversity. Deer also suffer. Herd health declines as the amount and quality of plant foods declines. Crowding also spreads infectious diseases.

Human health is also affected when there are too many deer. Virginia ranked 5<sup>th</sup> in the nation for deer-vehicle collisions in 2009. Nearly one in every 136 Virginia drivers will have a vehicle accident involving deer in the next 12 months.



### Why did I hear a chainsaw while walking in the park, and why are there so many cut trees? Trees need space to grow to help preserve special

Sections of the park have been cleared or thinned together is an effective tool in forest management. That are growing too close and thrive. Thinning trees that are growing too close together is an effective tool in forest management. Sections of the park have been cleared or thinned to help preserve special meadow and cedar forest habitats.

# Helping Our Land Heal



## A Natural Capital Stewardship Model



## What Can You Do?

**How we treat the land has lasting impacts.** There are many things you can do to help with the Helping Our Land Heal Forestry Pilot program. Here are some of them.



❖ **Sign up for one of our programs.** We have many programs listed in our Calendar of Events that talk about HOLH. Ask the person at the desk about these programs. Once you have attended one of these programs, you will be able to help us protect the forest.



❖ **Keep your dogs on leash and out of the streams.** Dogs are natural hunters and when off leash can be harmful to the forest. And please scoop! Scooper laws protect streams from being polluted by pet waste.

❖ **Stay on the trail.** When a person goes off trail they harm plants and compress soil. Shoes and boots can also spread harmful plant seeds.

❖ **Observe wildlife from afar.** All of the animals in the park are protected. Watching them from afar insures your and their safety.



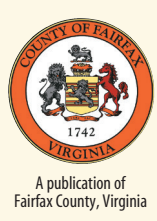
**Please Follow Park Rules.** These rules are in place to protect the forest. When you are familiar with the rules and follow them you are helping protect the park.

- 1. Protect the Animals.** Persons or pets should not harass, capture, remove, injure or kill any animal, its young or its eggs, or disturb the nest, den, burrow, lodge, roost, dam or other structure found in a park.
- 2. Protect Plants and Fungi.** Plants and fungus (e.g., mushrooms), including cuttings, flowers, seeds, berries or nuts, should be left as they are found.
- 3. Protect Natural Materials.** All naturally occurring materials, including wood, wood chips, sod, earth, humus, rocks, minerals, fossils, sand, water, should not be tampered with or removed.

Visit the Helping Our Land Heal Website.  
[www.fairfaxcounty.gov/parks/resource-management/holh.htm](http://www.fairfaxcounty.gov/parks/resource-management/holh.htm)

**Ellanor C. Lawrence Park**  
 703-631-0013  
[www.fairfaxcounty.gov/parks/ecl](http://www.fairfaxcounty.gov/parks/ecl)

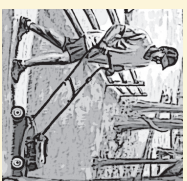
Visitor Center Hours: Mon., Wed.-Fri. 9 a.m.-5 p.m.  
 Sat. and Sun. 12 p.m.-5 p.m. Closed Tues.



If accommodations or alternative formats are needed, please call 703-324-8563. TTY 703-803-3354.



## Harmful Things



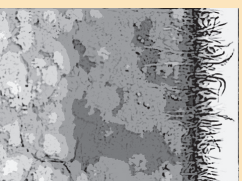
Planting grass, mowing or dumping yard waste in parkland damages the ecosystem. Pesticides kill beneficial insects, and fertilizers may pollute streams if applied incorrectly.



All-terrain vehicles are prohibited on all park trails in Fairfax County. They scare wildlife and wear away trails. Bikes can cause trail damage and erosion, so riding is limited to certain trails and parks.



Carving into or peeling bark off trees opens the door to insects and disease. Trees weaken and die due to air pollution and strangulation from invasive vines.



Mowing, high foot traffic and lack of foliage lead to compacted soils where roots become starved for oxygen and few animals live. Hard soils contribute to excessive water runoff, flooding and erosion.



Allowing pets to roam wild increases the threat to wildlife through hunting, or destruction of nests and habitats. There are dangers to your pet as well.



Overabundant deer deplete native vegetation through overbrowsing. Many forests lack native vegetation near the ground, and there are fewer young trees to replace the old when they die.

# The Way We Treat the Land has Lasting Impacts



Illustration by Phyllis Sanoff



Choose climate-hardy native plants when landscaping your yard. Reduce the need for pesticides by installing bird boxes to attract nature's pest controllers.



Be a good steward of your parks. Park staff need your help caring for parkland. Follow the rules and protect wild places. Stay on trails, and don't remove, collect or tamper with plants or animals.



Healthy trees are key players in air quality. Foliage cleans the air by absorbing carbon dioxide and releasing oxygen. Trees also provide natural habitat for native birds and wildlife.



Leaf litter and old wood retains moisture and reduces erosion. Softened ground is ideal habitat for insects and animals that break down the surface debris and create nutrient-rich soil. Healthy soil then invites plant and tree growth.



Pets should be kept on a leash for their safety as well as the safety of native wildlife and other trail users. Keeping pets close and on the trail reduces their exposure to ticks, rabies and risk of injury.



Managed deer populations allow native plants and other wild-life to thrive. Fewer deer also means healthier deer because food sources are more plentiful.



Steep stream banks are a sign of soil erosion. As higher volumes of rainwater flow into streams



due to hard packed soils and lack of anchoring roots, soil is washed into the stream, starving fish and insects of oxygen.



Litter is not just unsightly, it attracts unwanted pests and pollutes streams. Some materials release toxins into the water. Releasing non-native pets into our waterways disrupts local ecology.



Healthy streams teem with life. Fish, insects, amphibians and crustaceans thrive in waters rich in oxygen and other nutrients. They also play an important role in the food chain for non-aquatic wildlife.

Stream banks that are full of native vegetation reduce soil erosion. Gently sloping banks form catch pools and eddys which provide fertile spawning and nesting habitat for native wildlife.



Native plants and animals are part of a balanced ecosystem. Native and migratory species often depend on the availability of certain plants in specific seasons in order to maintain their populations.

