Tree-killing vines in Franklin Park

Many of you may have seen the recent study published in <u>Takoma Park, MD</u> where a researcher documented over 4,800 trees that are at risk of dying in the next 5-7 years.

The culprits? Invasive vines — <u>Porcelain berry</u>, <u>Winter creeper</u>, <u>Oriental bittersweet</u>, <u>English ivy</u>, and both <u>exotic wisterias</u> (Chinese and Japanese), to name a few.



Two dogwood trees on Virginia Avenue — on the right, a healthy tree. On the left, the tree is completely covered in Porcelain berry vines.

Take a walk around our neighborhood and you'll discover that many of our trees are at risk as well — and we need to take action soon to save them! Without intervention, these invasive plants will strangle, girdle, smother, choke out, and/or uproot our majestic trees. It's happening already, right under our noses.



Porcelain berry killing underlying trees where Virginia Ave meets Rhode Island.





Porcelain berry smothers everything underneath it. Closeup of the jewel-toned berries.



English ivy and Porcelain berry overwhelming mature trees on Virginia and Massachusetts. These trees will take down nearby power lines when they fall.

Why should you care?

- Vine-covered trees are more at-risk of falling and causing property damage and power outages during a storm event.
- A number of studies have shown that real estate agents and home buyers assign between 10 and 23 percent of the value of a residence to the trees on the property.
- A U.S. Forest Service study found that a 10 percent increase in tree canopy was associated with a roughly 12 percent decrease in crime.
- Trees reduce annual heating and cooling costs for a typical residence by 8 to 12 percent and increase property values by 10 to 15 percent.
- In one study, 98 percent of realtors believe that mature trees have a "strong or moderate impact" on the salability of homes listed for over \$250,000.

- A healthy 100-foot-tall tree has about 200,000 leaves. A tree this size can take 11,000
 gallons of water from the soil and release it into the air again as oxygen and water vapor
 in a single growing season.
- A mature tree absorbs carbon dioxide at a rate of 48 pounds per year.
- In one year, an acre of forest can absorb twice the CO2 produced by the average car's annual mileage.
- A single street tree returns over \$90,000 of direct benefits (not including aesthetic, social, and natural) in the lifetime of the tree.
- Trees contribute to longer pavement life due to reduced heating/cooling (expansion/contraction) of asphalt.
- Surgery patients who could see a grove of deciduous trees recuperated faster and required less pain-killing medicine than matched patients who viewed only brick walls.
- Average interception of rainfall by a forest canopy ranges from 10 to 40 percent depending on species, time of year, and precipitation rates per storm event.
- In urban and suburban settings, a single deciduous tree can intercept from 500 to 760 gallons of rainwater per year.



English ivy and Winter creeper beginning their killer climb on Rhode Island, Massachusetts, and Virginia.

What can you do?

Inspect all the trees on your property for vines on the trunks and branches of your trees. Wherever you find vines climbing the trees, cut out a large section of the vine (minimum six inches, preferably at least three feet) and remove it, so that the vine loses its source of nutrients and cannot heal itself. Be careful not to cut into the bark of the tree.

Depending on the thickness of the vine, you may need one of the following tools:

- Garden clippers
- Loppers
- Folding saw
- Bow saw
- Small crow bar to pry away hardwood vines (e.g., Winter creeper)





Winter creeper smothering a tree on Virginia Avenue. Remove a large section of the vine to kill it.

Be sure to wear gloves! If you are using a saw, wear proper eye protection, too.

If you have access around the base of the tree, pull the vines back and clear a circle around the trunk that extends three feet out in each direction. If the undergrowth near the tree is too dense for you to do this, just cut away the vines as best you can.

Remove what you can reach, but do NOT try to pull vines out of the tree canopy. You may unintentionally pull the tree over and cause injury to yourself or others. Leave the vines in place to decompose naturally.

Once you have cut and removed a large section of the vine, the upper part will begin to die within hours to a few days, and the tree will be free to continue growing.

Periodically monitor your trees for vine regrowth or for new vine species. And offer to lend your neighbors a hand with their vines, if they need it! Removing the invasive plant species from each of our yards will preserve our tree canopy and stop the spread.



Trunk damage from escaped exotic wisteria; wisteria infestation damaging native trees.

Last, but not least — **BE ON THE LOOKOUT for Kudzu!** Kudzu, known as "the vine that ate the South," has moved northward due to our warming winters. Lake Accotink Park here in Fairfax County is already fighting an infestation of this pernicious invader. Once established, it is <u>extremely</u> difficult to eradicate, so get on top of it immediately!





Kudzu flowers.

Kudzu leaves.



Kudzu, "the vine that ate the South" — now in a park near you.