

Summary Of Progress January 1, 2008

Introduction

In 2003 we began an organized effort to control Oriental Bittersweet *Celastrus orbiculatus* along the Bronx River Parkway Reservation between the southern Westchester County line and the northern Kensico Dam.

The goals are:

1. Remove vines from signature trees along the 17 mile stretch from the Westchester County line on the south to Kensico Dam on the north.
2. Provide information, encouragement, and resources to other efforts in other locations.

The Westchester County Parks Department which holds bi-weekly training sessions between November and April. The program has trained at least 200 volunteers. The schedule can be found at <http://www.vinecutter.com/schedule.htm>.

The program is encouraged by the Bronx River Parkway Reservation Conservancy. Jim Sutton is executive director.

The good news

Oriental Bittersweet can be controlled and, in many cases eradicated by hand over one to five years with the mean being two to three years.

It does not grow back very well. It is not nearly as virulent as porcelain berry or grape (for example).

It is best cut between November and April when the leaves are off the trees.

High/Low Method

By far the most effective method is to cut vines low to the ground and above eye level. We call this the "high/low" method.

- Vines cut low to the ground do not send up numerous root suckers. I personally have never seen this happen.
- Vines cut low to the ground appear to be starved for light, do not send up new tendrils as often and more often die.
- We cut high because vines that are left hanging provide a convenient ladder for new tendrils of all kinds.
 - We will return to find the vine is now a climbing pole, not only for bittersweet, but also for multiflora rose, porcelain berry, grape, and honeysuckle.
- We also cut high so that other vinecutters can see the area that has been worked more easily. It's a little heartbreaking to fight your way through a rose bush only to find that the vine has already been (invisibly) cut.
- A badly infested tree looks "bearded" when it has been rescued. The technique is very effective.

Thigh-Level Method

Vines cut at thigh-level that have sunlight will develop new tendrils about 70% of the time.

- The tendrils grow from the cut end (perhaps 2 to 6 of them), but also from the vine further down. They are quite vigorous.

Mortality

Our rule of thumb is that vines cut using the high/low method die about 50% of the time. A patch can be completely eradicated in as little as 1 year. It usually takes three years. In only a few cases has it taken the full five years.

- It's very important not to provide "ladders" for new growth.

Trees vs. Thickets vs. Ground Cover

Eradicating *Celastrus* from trees is the easiest task because it is visible and usually easy to get to. Once you "beard" it you can see new growth

Eradicating *Celastrus* from thickets is tough because you really have to take out the whole thicket which may also contain porcelain berry, multiflora rose, honeysuckle, grape and virginia creeper. The thicket may also be home to many critters and birds so check with Audubon and local keepers before removing it.

- Thickets really need a trained eye in supervision. We barely rescued a nice spice bush from the hands of a volunteer. We lost an 80 year old bladder nut grove to a maintenance crew.

Celastrus as ground cover looks impossible but is actually quite doable if you take it slowly. Usually there is an extensive network of roots.

- We wander through the ground cover each year snipping at targets of opportunity. They almost always die.
- Next year the field is much clearer. Snip again but don't try to be absolutely perfect.
- The third year the few remaining plants are easy to see and eradicate.
- We cleared an impossible looking patch this way. Low, soggy ground may have contributed to our success.

Poison

We have no experience with poisons.

Things to Avoid

Poison Ivy.

The County Parks Department makes a special effort to train volunteers to recognize poison ivy vines and branches.

Never Cut Anything Growing on the Bark

Celastrus almost always hangs free or coils in a characteristic way. We never cut anything that grows vertically, attached to the tree. It may just be English Ivy, but it could also be Poison Ivy.

Safety

Wear safety glasses, gloves, boots and sturdy clothing. Exercise common sense.

Misconceptions and Observations

- Low-cut *Celastrus* does not produce root suckers. In ten years I've never seen this happen. There may be suckers present, but cutting itself does not seem to create them.
- Low-cut *Celastrus* produces by far the highest kill ratio.
- High-cut *Celastrus* is most likely to live and produce vigorous tendrils
- Pulling *Celastrus* roots on new shoots may be effective but provides new ground for the next invasive.
- Cutting *Celastrus* shoots near the ground almost always kills them.

Photos and additional information is available at www.vinecutter.com