



NEW YORK  
STATE OF  
OPPORTUNITY

Department of  
Environmental  
Conservation



## Trees for Tribes

# Site Maintenance Guide for Streamside Plantings



# Site Maintenance

Maintenance of your Trees for Tribs site helps assure the long-term success of your plants and the overall strength of your new stream buffer. This guide provides step-by-step instructions for maintenance of your Trees for Tribs site. Plan to visit your site at least twice a year and also after major storms or extended dry periods.



The same site  
in spring 2012



A planting site after four years' growth.  
The circle highlights the same tree.



# Survey Your Site

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Before leaving for your site, some things you may want to bring with you are listed below:

- Gloves
- Hammer
- Camera
- Ruler
- Bucket or watering device
- Extra tree tubes, zip ties and stakes (if available)

## At Your Site

- Look over the whole site.
- Take pictures, capturing the entire site and any concerns.
- Fix any leaning or broken tubes (see page 5).
- Clean and straighten weed mats (see page 5).
- Assess the health of the plants (see page 7).



## Tree Tubes

Tree tubes require regular maintenance. They help young trees grow and increase their chance of reaching maturity.

Generally the tree tube should stay on the tree for a few years. When your tree is large enough, remove the tree tube to allow the tree to grow unrestricted.

**Is the tube ready  
to be removed?**



The tube should not be removed until the tree is taller than the tube and the trunk diameter is at least 2 inches. Measure the diameter of the trunk at approximately six inches above the base.

- If the diameter is more than 2 inches, carefully remove the tube.
  - ▶ If a metal tag is attached to the tube, move the tag to a branch so that it stays with the tree.
  - ▶ If tubes and stakes are in good shape, please return them to the Trees for Tribes program, which will reuse them.
- If the diameter is less than 2 inches, leave the tube on and follow the tube maintenance guide on page 5.





Measure the tree's diameter six inches from the ground.

This tree is not yet 2 inches across (diameter) and still needs a tube.



# Tube and Mat Maintenance

## Clean and Straighten Your Tubes

- Before cleaning tube, tap to see if bees or wasps are present. Remove debris inside the tree tube. This may include leaf litter, weeds, and animal or wasp nests.
- Straighten leaning stakes and hammer them firmly into the ground.
- Replace broken or missing tubes and stakes.
- Securely attach the tree tube to the stake.
- Press tree tubes flush to the ground.

## Weed Mats

Clean debris off mats and tighten staples that have come loose. Mats are designed to decay and do not need to be replaced after they have broken down.



Tighten loose staples.



1. Clean all debris out of tubes.



2. Straighten tubes and stakes that have fallen or are leaning.



3. Hammer loose and leaning stakes firmly into the ground.



4. Press tubes flush to the ground.



## Assess the Health of Your Plants

Look at all of your trees and shrubs to see how they're doing. If you find any of the following, you may need to take the recommended actions:

### Wilted Leaves

- ▶ This could be a sign of dry soil. To check, dig 3-4 inches into the soil. If it feels dry, water your site at least once every 10-14 days. Generally each plant needs 2-3 gallons of water.

### Bark Damage

- ▶ If tree tubes are still on, there may be mold damage from debris left inside. Be sure all debris is removed from the tubes.
- ▶ Once tree tubes have been removed, trees become susceptible to new dangers, including buck rub, beaver damage, and mower damage.

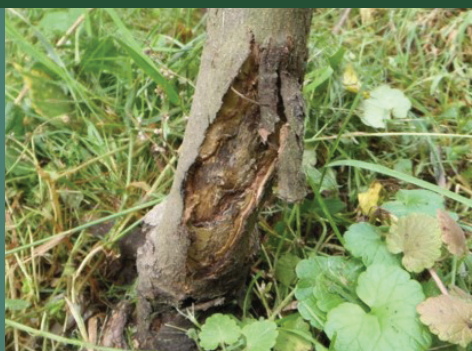
- **Protection from deer**

- ◆ <http://www.gardeningknowhow.com/plant-problems/pests/deer/how-to-protect-trees-from-deer.htm>

- **Techniques for Controlling Nuisance Beaver**

- ◆ [www.dec.ny.gov/animals/6992.html](http://www.dec.ny.gov/animals/6992.html)

Mowing can easily injure or kill young trees and shrubs. Stream buffers are more effective when native flowers and grasses are allowed to grow around the trees and shrubs.



# Assess the Health of Your Plants

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## **Branch Ends are Missing Leaves or have Shredded Leaves**

- ▶ This may be a sign of deer or rabbit browse. Make sure that tree tubes are correctly installed. If shrubs have significant damage, consider installing a fence or other form of protection. Some options are described in these resources:

- [www.gardening.cornell.edu/factsheets/deerdef/](http://www.gardening.cornell.edu/factsheets/deerdef/)
- [www2.dnr.cornell.edu/ext/info/pubs/Wildlife/reducing%20deer%20damage.pdf](http://www2.dnr.cornell.edu/ext/info/pubs/Wildlife/reducing%20deer%20damage.pdf)

## **Discolored Leaves, Unusual Growth**

- ▶ This may be a symptom of disease or insects. If problems are widespread, determine the cause to find out whether action is required. Many resources are available online to help diagnose problems, including these useful sites:

- [www.treesaregood.com/treecare/resources/InsectAndDisease.pdf](http://www.treesaregood.com/treecare/resources/InsectAndDisease.pdf)
- <https://www.americanforests.org/discover-forests/tree-care-questions/#care>

## **Other Tree and Shrub Problems**

- ▶ Cornell Cooperative Extension office might be able to help with tree and shrub problems. Find your local office at the link below:
- [www.cce.cornell.edu/learnAbout/Pages/Local\\_Offices.aspx](http://www.cce.cornell.edu/learnAbout/Pages/Local_Offices.aspx)

## Identify and Remove Weeds

Look for shrubs or vines growing at the site that were not intentionally planted. Some of these plants may be welcome additions from local native sources. But if invasive plants are crowding out your Trees for Tribes plants, remove them using the recommended removal techniques provided in the resources below. This will help ensure that your plants become established, grow faster, and create a more effective stream buffer.

- Identify any invasive plants. Many resources are available to help with identification, such as New York Invasive Species Information: [www.nyis.info/](http://www.nyis.info/)
- If you identify any invasive plants, find recommendations for their control or removal from the Plant Conservation Alliance's Alien Plant Working Group: [www.nps.gov/plants/alien/factmain.htm](http://www.nps.gov/plants/alien/factmain.htm)



*photo credit: Karin Verschoor*

Multi-flora rose, a common invasive plant



## Post-Storm Events

A major storm with heavy wind and flooding can knock down plants and tubes or wash them out of the ground.

- Following a storm, check your site as soon as possible once conditions are safe.
- If plants have been washed out of the soil, try to replant them before their roots dry out. Be sure to compact the soil around the roots to ensure there are no air pockets below the surface.
- Replace and straighten any tubes and stakes that have been washed away or that have fallen over.
- Clear off and straighten any remaining mats.



Be sure to straighten plants and cover all roots with soil when replanting after a storm.

## Thank You!

The maintenance work that you do at your site helps to assure the health of your plants and the successful establishment of a healthy stream buffer.

Please send photos and updates on the condition of your site to Trees for Tribs staff.



Trees for Tribs engages volunteers in replanting New York's streams. Thank you for helping us!

## Hudson River Estuary Trees for Tribs

### Address:

Stream Buffer Coordinator  
Hudson River Estuary Program  
NYS DEC Region 3  
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New Paltz, NY 12561

### Phone:

845-256-2253

### E-mail:

[HudsonEstuaryTFT@dec.ny.gov](mailto:HudsonEstuaryTFT@dec.ny.gov)

### Webpage:

[www.dec.ny.gov/lands/5098.html#Tribes](http://www.dec.ny.gov/lands/5098.html#Tribes)



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