

University of Minnesota – Tree Care Advocate Program Tree Steward Training Outline

Number of People: Minimum 10, Maximum 20

Participants: Volunteers and city staff living and volunteering/working within the community/area

Cost: \$25 per individual to be paid to University of Minnesota (cost of printing manuals, literature, etc.)

Time: Dependent upon the needs of the community and content covered.

See time allotment in italics throughout the documents for estimates

Classroom Program: Depends on amount of content covered and number of sessions

Field Session: Depends on type of content covered and number of sessions – city/community create maps/select location and instructors will demonstrate skills and ask volunteers questions to get them thinking about the information we covered indoors

Manual: Provides detailed information of the below concepts; it will be a series of chapters that correspond to the below topics and the community can choose what they wish to address in training

Classroom Curriculum

- Publications
 - Tree Owner's Manual
 - Tree Owner's Manual cards
 - Planting Guides
 - Stem Girdling Root Booklets
 - Forest Resources Outreach Line cards
 - Misc – depends on topics covered and literature available (literature on various diseases, insects, etc.)

1. Program Overview - **Required** (30 minutes total):

- Personal Introductions (5 minutes)
- Program Introduction (25 minutes)
 - **City & University Contact information**
 - Introduce the Tree Care Advocate Program and importance of being a Tree Steward
 - Certification & Recertification
 - How to work with the public
 - **Guidelines and who to direct questions from the public to**
 - Public vs. Private trees
 - Safety & how to dress

2. Best Planting Practices (1 hour total):

- Quick overview of basic tree anatomy (5 minutes)
- Tree Stock – pros and cons/uses of each (30 minutes)
 - B&B
 - Burlap –treated & untreated
 - Strings/ties from packing

- Wire baskets
 - Potted/bagged (show types of containers)
 - Stem girdling root
 - Strings/ties from packing
 - Excess top soil
 - Planting depth
 - Boxing soil ball
 - Sucker formation
 - Bareroot
 - How to transport
 - Planting depth
- Gravel beds and uses (*10 minutes*)
- Amendments, fertilizer/nutrients and hydrogel (*5 minutes*)
- Post-planting Care (*10 minutes*)
 - Mulch
 - Stem Protection
 - Staking
 - Stakes
 - Ties
 - Stem girdling roots & how to fix later on

3. Watering (*30 minutes total*):

- Devices (15 minutes)
 - Water bags
 - Water rings
 - Water hoses
- Cost of watering (5 minutes)
- How to help water in your community (10 minutes)
 - **Will address specific solutions the community wishes to utilize volunteers for**

4. Pruning (*1.5 to 2 hours total*):

- Discuss Tool use and cleaning (*10 minutes*)
 - **Pruning Shear**
 - **Tri-Cut Saw**
 - **Pole pruner**
 - **Pole saw**
 - Discuss appropriate cleaning & disinfecting of tools
- Review restricted species and species to note (*30 minutes*)
 - Basswood
 - Oaks (use of Shelac)
 - Elms
 - Ash
 - Honeylocust

- Crabapple & Mountain Ash
- Birch & maples
- Types of removals overview & what your community will complete – we go in depth to describe the issues that occur if these removals are not addressed (*max: 45 minutes*)
 - **Stem Protection**
 - **Mulch Volcanoes**
 - **Sprouts and Suckers**
 - **Included Bark**
 - **Co-dominant leaders**
 - **Crossing/rubbing branches**
 - **Good spacing between branches**
 - **Dead wood**
 - **Temporary Branches**

If you community will have volunteers doing more than sprouts & suckers, we will talk about fundamentals for pruning like live crown ratio and amount of material to remove to maintain the health of the tree. This takes an extra 10 minutes.

- Pruning Practices (*20 minutes*)
 - Proper pruning & the three-cut method
 - Poor pruning cuts
 - CODIT
- Data collection, why it is important, and how it will be managed (*5 minutes*)
- **Discuss how the community will run volunteerism post-training** (*5 minutes*)

5. Tree Health (*depends completely on selection and how in depth*):

This section depends completely on the community, what their needs are, and what the city would like the volunteers to address in the field. This is based on the lifecycle of trees in the community and can be different every year to reflect these changes (young for a few years/sessions to focusing on mature trees)

- Tree ID (*15 to 45 minutes based on number of species addressed*):
 - **Based on most common trees in the community**
- Young Tree Health (*50 minutes total, or 5 minutes an issue*):
 - **Dieback**
 - **Leaf Scorch**
 - **Trunk Wounds**
 - **Wilting**
 - **Broken Branches**
 - **Dead branches**
 - **Girdling**
 - **Leaning**
 - **Storm Damage**
 - **Vandalism**

- Mature Tree Health *(50 minutes total, or 5 minutes an issue)*:
 - Dieback
 - Leaf Scorch
 - Trunk Wounds
 - Wilting
 - Broken Branches
 - Dead branches
 - Girdling
 - Leaning
 - Storm Damage
 - Vandalism
 - Decay
- Tree Diseases, Pests, Common Issues *(estimate 10-20 minutes a topic for rough overview)*
 - Emerald Ash Borer
 - Dutch Elm Disease
 - Oak Wilt
 - Bur Oak Blight
 - Black Knot of Cherry
 - Bronze Birch Borer
 - Japanese Beetle
 - Thousand Cankers Disease
 - Gypsy Moth
 - Two-lined Chestnut Borer
 - Scale Insects

6. Competency Assessment -**Required** *(30 to 45 minutes)*

The assessment is based on the topics covered in the course. This is meant to reinforce where to find answers to questions that we covered in class and to remind volunteers where to find the information they may need as they complete volunteer work in the future.

Field Session

- Best Planting Practices *(30 minutes total)*:
 - Demonstrations: boxing, planting, staking, mulching, initial watering, etc.
- Pruning *(30 minutes to 90 minutes total)*:
 - Review concepts as a group, then split off to get more hands on work by either:
 1. If they aren't doing many types of removals, we will send the groups off to work alone and have staff/trainers float to provide technical assistance throughout the field session **OR**
 2. If they are doing many types of removals, we will have staff/trainers pair up with each group to provide technical assistance for the whole field session
- Tree Health *30 minutes to 90 minutes total*):
 - This field session will reflect topics covered in class and to assist with tree ID