Casey Trees
Trees Count
Inventory
Program

Management Guide
for Washington, DC

Casey Trees
Geographic Resources Team
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I. Introduction

Community based tree inventories serve to build information about DC's tree canopy, promote tree care and increase community members' local environmental awareness. Taking inventory of Washington D.C.'s trees is not new for Casey Trees. In 2002 we worked with hundreds of volunteers to collect data including location information for more than 100,000 street trees. Since then we have performed more specialized inventories each summer. Over the last few years we've worked with federal agencies to create tree management plans based on these inventories, community members to find their neighborhoods plantable spaces and trained staff, interns and volunteers to catalog the district's largest trees and to assess tree mortality in effort to improve planting and tree care practices.
The following provides detailed guidelines for planning and executing a Community Tree Inventory.

II. Program Goals

Overall Goals for Trees Count Inventories

- Increase community awareness of the composition and benefits of the urban forest
- Foster tree care for community trees through education and "ownership"
- Build and update information about Washington, DC's tree canopy
- Develop partnerships with community organizations including training new Citizen Foresters and promoting local tree care programs

Casey Trees Objectives for all inventories:

1. *Quality:* Collect high quality data (ensure team leaders are aware of this even if working with school kids)
2. *Productivity:* Finish data collection within the designated period
3. *Participant Satisfaction:* Positive feedback from volunteers and interns; Follow up with deliverables and participant survey if necessary to understand any challenges
4. *Outreach*: Community group is responsible for most of the outreach to their neighborhood constituents. Permission from each homeowner as appropriate, NPS collaboration and cooperation, media release of the results and to inform our success measures such as the Tree Report Card
5. *Safety*: good health & safety record for all participants/any incidents documented

III. Timeline

Project Establishment

- *2 months or more before inventory:*
  - Community fills out application and submits to Casey Trees
  - Application will give insight into scope and goals of inventory
  - Meet with community representatives to review application, clarify scope/goals, and determine specific next steps/timeline
- *1 to 2 months before inventory:*
  - Create poster overview maps
  - Create mapbooks for each data collection area
  - Set up training schedule for staff/volunteers if necessary
  - Post request on Wild Apricot seeking Citizen Foresters as Team Leads
- *1 week before inventory:*
  - Offer inventory training if necessary
  - Review Inventory Checklist with community group to ensure that all details are taken care of (e.g. Who will provide food? Where will the registration table be set up?)
  - Ensure that the inventory bin has all materials for data collection, safety, etc.
  - Ensure that Casey Trees staff responsibilities for inventory day are being met including responsibilities such as transporting equipment (e.g. tables, flags) to the registration table.

Timeline and scheduling for the Inventory

General Considerations for Scheduling your inventory:
- Existing tree inventories should be done between roughly April 15 – October 15 to ensure leaf on for species and condition accuracy
- Plantable space inventories can usually be done year round following our *Right Tree Right Place guidelines.*
- The deadline for fall tree planting applications is June 15th and for spring plantings November 15th. If one of the goals for the inventory is to plan a planting with Casey Trees then these are important dates. There is some flexibility with the Tree Planting Department that all the exact locations do not have to be in by these times, but please discuss with them.

Sample Saturday Morning Timeline
- 8am – Staff arrives and sets up table/tent/chairs/banners/clipboards/give-aways
- 8:30am – partners arrive with coffee/breakfast
- 9:00am to 9:30am -- volunteer arrival and begin registration and team assignments
- 9:30am – Begin training of volunteers
- 9:50am -- Welcome comments by Site Manager (GR lead) and Lead of Partner group
- 10:00am to 12pm or 1pm -- Data collection

- 12:30 to 1pm -- Wrap up
  - Possible light lunch (but not always!)
  - Thank yous, closing remarks and announce any follow up and/or next steps
  - Ensure you have all the map grids and data collection sheets returned
  - Clean up area – don't forget strategically placed signs and banners

Follow Up and Deliverables

The length of turn-around time between the conclusion of data collection and the delivery of final products will depend on the scope of the inventory and the deliverables requested. Generally we set the expectation that finalization could take up to one month (not a month of dedicated work, of course). In the case of existing tree inventories the bulk of this time is dedicated to entering the tree points and attributes manually into GIS. This is often done by a Casey Trees GIS Intern.

Recently we have been consistently providing several final products including a printed map book showing the inventory and summary data, a "web slider" showing summary results on the Casey Trees website, and an upload of the collected tree data to the interactive Casey Trees Map. These three products require approximately one full day of staff time to complete after all data entry and clean-up.

IV. Data Collection

Data Collection Timeframe

Casey Trees thus far has always collected Trees Count inventory data in a "one day blitz". This allows for a cohesive community event and efficient data collection. There may be cases, however, when it makes sense for data collection to be scheduled over a few weeks or a month by semi-independent teams of volunteers. The latter strategy may allow more people to participate in data collection but there are losses of community cohesion and management efficiencies.

Data Collection Methods

The data to be collected at a given inventory depend on the goals and resources of the community group. Casey Trees generally requires the collection of each tree's: *species, diameter at breast height (DBH),* and *condition*. In many cases community groups will want to identify *plantable spaces* too.

For complete information about our field data collection methods please link to an example of our Data Fields and Methods document.

Primary Data Collection Roles

Teams of 3 volunteers:
- *Map Recorder*: Note the location of each tree on the paper map with a marker. Assign a number that corresponds with that of the Tree Data Collector.
- *Tree Data Collector*: Record the species, DBH, and condition of each tree on the spreadsheet. Ensure that the row number lines up with the Map Recorder's numbering.
- *Field Data Collector*: Measure each tree's DBH. Assist with Tree identification and condition rating.

These tasks can also reasonably be divided up among four people or, if necessary, between two but it gets a bit tricky to carry and maneuver with all the equipment. **Teams must always have at least 2 members.**

V. Training_____

We put on two levels of training for different groups of people based on the level of expertise required. All inventory participants should expect a 15 to 20 minute training prior to beginning data collection on the day of the inventory. Citizen Foresters may receive additional training through attending relevant Casey Trees classes. We encourage inventory volunteers to attend classes wherein they can hone their tree identification skills. Click to visit the Casey Trees class schedule.

On the day of the inventory we will spend time going over the use of the inventory tools and the methods described in the previous section and in this document: Trees Count Data Collection Methods

VI. Staffing and Materials_____

Staff Roles:

- *Site Manager*: The point person for a particular inventory. Often this has been the Director of Geographic Resources but not always.
- *Data Collection Specialist* A Geographic Resources staff member in charge of data collection and conducts the training.
- *Volunteer coordinator*: Coordinates registration of volunteers, recruitment for future events, and any number of other tasks. In some cases a Geographic Resources Staff member or other staff member can fill this role.
- *Roving Expert on Tree ID:* Any staff member with solid Tree ID skills
- *Photographer:* Generally someone from the Communications team (optional)

Note: Any and all staff members are welcome to help

Volunteers Roles:

See the Data Collection Section above.

Materials

The Inventory Prep Checklist contains an overall list of required inventory materials. The primary data collection materials are the map, the tree data spreadsheet, the tree reference sheet, a DBH tape, a Tree ID book, and documentation of the methods.

VII. Suggested Final Products_____

The community group will work with Casey Trees' Geographic Resources staff to determine the specific deliverables. Here are some possibilities:

1. *Final Map Book* (at least two copies – one for Casey Trees library and one for community group)
2. *Slideshow for the website* (the "web slider")
    a. Includes background information, map examples, and summary results.
    b. A how-to document (useful for Casey Trees staff) can be found here.
3. Add inventory data to Casey Trees Map in the Community Tree Inventory section
4. Provide data for the *Tree Report Card* or other DC Urban Tree Canopy measurement tools
5. *Media release* of any significant results
6. Citizen Forester/Casey Trees evening *Workshop* to report-out on findings
7. Presentation of Findings to *regional workshops* (i.e. 2009 Urban Forest Ecosystem study results presented at 2010 MillionTrees NYC March Symposium)

If you are interested in learning more about our Trees Count Community Tree Inventory Program please contact the new Director of Geographic Resources, Tom Buckley (tbuckley@caseytrees.org)