

## Understanding tree appraisal values

1. TreeWorks quantifies the value of shade trees which may be lost due to external variables. These values incorporate a regionally defined **species rating**, a defect-related **condition rating** (%), and a site-specific **location rating** (%). Analysis of these variables together results in the **appraised value** of a specific tree.

### 2. Appraised Value = Basic Value x Condition x Location

**Basic Value = Replacement Cost + (Basic Price x [TA(A) - TA(R)] x Species)**

**Condition** = A rating of the tree's structure and health and based on 100 percent

**Location** = the average for the tree's Site, Contribution and Placement and based on 100 percent

**Replacement Cost** = the cost to purchase and install the largest locally available and transportable tree in the area.

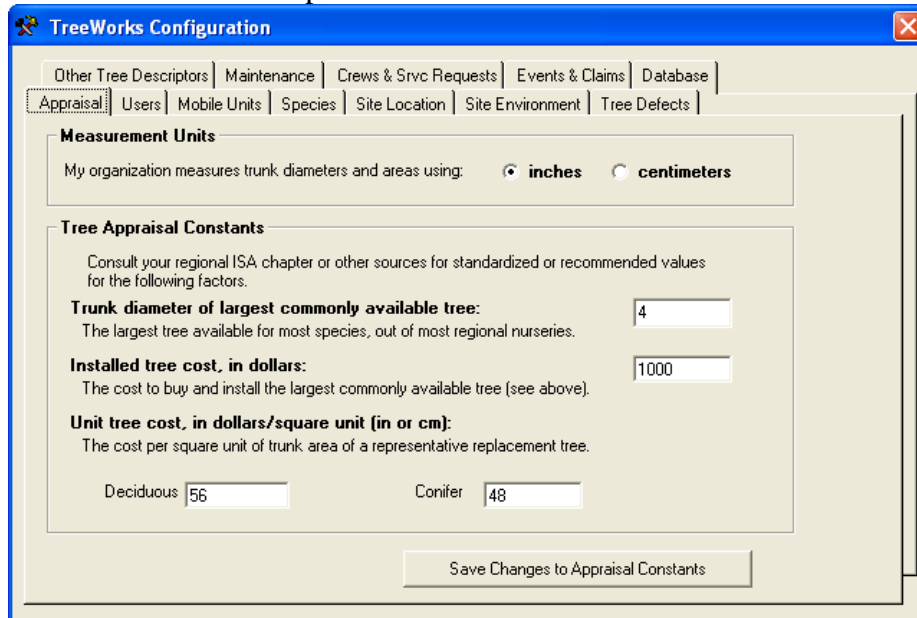
**Basic Price** = the cost per square inch of trunk area of a replacement tree measured at the height prescribed by the American Nursery Standards.

**TA(A) = Trunk Area** at 4.5 feet above the ground of the appraised tree

**TA(R) = Trunk Area** at 6 inches or 12 inches above the ground of the replacement tree

**Species** = the rating for a particular species and based on 100 percent

3. Within the TreeWorks desktop format this information is handled as follows.



The screenshot shows the 'TreeWorks Configuration' window with the 'Appraisal' tab selected. The window has a blue title bar and a menu bar with options: Other Tree Descriptors, Maintenance, Crews & Svc Requests, Events & Claims, Database, Appraisal (selected), Users, Mobile Units, Species, Site Location, Site Environment, and Tree Defects. The main content area is divided into two sections: 'Measurement Units' and 'Tree Appraisal Constants'. In the 'Measurement Units' section, there are radio buttons for 'inches' (selected) and 'centimeters'. The 'Tree Appraisal Constants' section includes a note to consult regional ISA chapters for standardized values. It contains three input fields: 'Trunk diameter of largest commonly available tree' (value: 4), 'Installed tree cost, in dollars' (value: 1000), and 'Unit tree cost, in dollars/square unit (in or cm)'. The unit cost section has two sub-inputs: 'Deciduous' (value: 56) and 'Conifer' (value: 48). A 'Save Changes to Appraisal Constants' button is located at the bottom of the window.

4. These regionally defined values combined with the highly subjective condition and location ratings result in the cost associated with replacing a tree of variable size and the socioeconomic effect that tree had on its surroundings.

5. With this specific Red Maple;

$\$1200 = BV \times .75 \text{ (condition)} \times .75 \text{ (location)}$

$\$2133 = BV$

The screenshot shows a software window titled "View/Edit Tree Site" with a blue header bar. Below the header is a tabbed interface with "Tree Info" selected. The main content area is divided into several sections:

- Site ID:** 154
- Site Type:** tree
- Species:** Common name: mapl.red; Botanical name: acer rubrum; Species rating: 70
- Condition:** Defects: co-dominant stems; Condition rating (%): 75; Risk tree: no; Hardware: (empty dropdown)
- Dimensions:** Diameter: 8; Spread: 20; Height: 25; Trunks: 1
- Cultural Value:** Location rating (%): 75; Special tree: no; Appraised value: \$1220
- Origin:** Year planted (yyyy): (empty); Tree source: (empty dropdown)
- Notes:** (empty text area)

At the bottom left, there is a checkbox for "Edit Mode" which is unchecked. At the bottom right, there is an "OK" button.