Tree identification Identify the tree with both common and scientific name, including genus, species and variety or cultivar designation (if known).

Exact location of tree In urban areas, include the street address and the location of the tree on the property (backyard, street tree, etc.). In rural areas, include specific directions to the tree, GPS coordinates and location in reference to any highways, trails, campgrounds or geographic features. For all trees, include the county name and nearest municipality. Trees without an actual street address must include a detailed map with specific tree location marked.

Other information Names and addresses of nominator, owner, verifier, date of measurement, comments on the tree's condition and any other relevant information known.

Photo Include a photo of the tree, by submitting photos you grant the Colorado Tree Coalition permission to post the images on the CTC website. Submit it to Neal Bamesberger: nbamesnerg871@hotmail.com

## How to Measure a Tree

## Trunk Measurement

1. Using a flexible tape measure, measure the distance around the trunk of the tree to the nearest quarter inch (circumference), or with a D-tape (diameter). This measurement should be taken at 4.5 feet above ground level.
2. If the tree branches below 4.5 feet, it might be a multi-stem tree. To determine if the tree is a multi-stem form or not, use the pith test method as follows: Visualize lines vertically through the center of each of the trunks. If they intersect above ground level, it would be considered a single trunk tree, and the measurement would be taken at the narrowest point on the trunk. Report the height at which the measurement was taken.
3. If the pith lines intersect below ground level, then it would be considered a multistem tree, and a measurement for each stem would be taken at 4.5 feet.
4. If the tree is on a slope, use the mid-point of the trunk and measure at 4.5 feet above ground level. If the trunk is leaning take the measurement along the trunk at 4.5 feet, measure perpendicular to the trunk.
5. If there is a branch or growth on the trunk at or below 4.5 feet, measure at the narrowest part of the trunk and report the height at which the measurement was taken.

## Height Measurement

To measure a tree's height, a clinometer, or laser rangefinder is recommended. If none of these are available, you can estimate the height using a straight stick cut to the exact length of your arm. Walk away from the tree to a point where, by holding the stick
vertically at arm's length, the entire tree's vertical center line is hidden behind the stick. This method works best when you are at the same elevation as the base of the tree. Measure the distance to the base of the tree - this distance will be approximately the same as the tree's height.

## Crown Spread Measurement

Measure both the widest spread of the crown and the narrowest spread of the crown. Add the two measurements together and divide by two to obtain the average crown spread.

## Total Point Value

The total point value for a tree, according to American Forests, is calculated as follows: Circumference (in inches) + Height (in feet) $+1 / 4$ Average Crown Spread (in feet) $=$ Total Points. The Colorado Tree Coalition will calculate the official Total Points for each nominated tree.

Your nomination will be reviewed after the annual deadline. If your tree's total points tops the current first place champ tree for a particular species you will receive champion tree certificate. If the tree is not the largest, but makes second or third place, the champion tree list will reflect those changes and be kept on file. If the tree is a national champion candidate, your nomination will be forwarded to American Forests for consideration,

State champion trees should be checked and re-measured at least every 10 years. If you're re-measuring a tree, please send an email to Neal Bamesberger at nbamesberg871@hotmail.com, listing the exact location of the tree, the new (verified) measurements and any other new information about the tree's condition, owners, etc.

## List of Verifiers

All new nominations must be verified prior to submittal of the form. You can check with your state area forester by visiting. https://csfs.colostate.edu/areas/ or contact your local city forester.

