

# Guide to Landscape Appraisal of Tree Species in Kentucky Landscapes

Qualified green industry professionals are often called upon to determine monetary values for landscape trees. This may occur as a result of intentional or unintentional damage caused by another individual, insurance claims, or condemnation of a property by imminent domain. This valuation is determined by considering four factors:

- species
- size (trunk diameter measured at 4.5 feet above the ground)
- condition (i.e. vigor, vitality, habit, etc.)
- aesthetic and environmental contributions to the landscape

This publication is intended to aid professionals in determining the value of species in Kentucky (the Commonwealth). This valuation method is not appropriate for valuation of shrubs, forest trees, pasture trees, trees being used for income (i.e. orchards, nursery production, Christmas tree production, etc.). It is solely for trees that are an integral part of a formal, managed landscape. Sentimentality and punitive damages do not enter into this valuation method but may be considered by the judicial system. Consult *What is Your Tree Worth* (<http://www2.ca.uky.edu/agcomm/pubs/ID/ID240/ID240.pdf>) for additional information on this process.

The values for individual species presented in this document were determined by a committee of green industry professionals considering four genetically influenced factors associated with success of these species in Kentucky landscapes. These include:

- Climate Adaptability:**
- cold hardiness
  - frost tolerance
  - drought tolerance
  - storm (ice, snow, wind)
- Growth Characteristics:**
- tolerance to different sites
  - vigor
  - structural strength
  - aesthetics
  - life expectancy
  - pruning requirements
  - potential to be invasive
- Soil Adaptability:**
- structure & texture
  - drainage
  - moisture requirements
  - acid/alkaline
  - mineral element limitations
- Resistance/Tolerance to Biotic and Abiotic Challenges:**
- disease
  - insect
  - air pollution

This is a guide, not a standard. It enables an experienced assessor to assign an unbiased assessment of the monetary value of trees too large to replace. The assessor may deviate, with cause from the species rating presented in this publication. These deviations must be defensible by the assessor in a court-of-law or other venue questioning a valuation by an assessor.

This guide was developed for use in Kentucky but may be valid in other regions. Permission for its use is granted at no charge to qualified green industry professionals on condition that the Kentucky Arborists' Association, its officers and members, and individuals providing input into the development of these valuations are held harmless in any dispute arising from the use of this information within or outside the boundaries of the Commonwealth.

Extensive variations in soils and climate exist throughout the Commonwealth. Species suitable in one region may not survive in other areas. Even small residential lots can have extreme variations in soil and environmental conditions. Valuations assigned to a species assumes that the species has been appropriately cited and maintained. These values are based on the professional observations of the individuals throughout their professional careers.

The percent assigned to each species appears as a 10 point range from 10 to 100% (i.e. 60-70%, 70-80%, etc.) with the mid-point (i.e. 65%, 75%, etc.) being the average for most members of a species. Values to the high or low end of the range are for genetically superior or inferior individuals. Value do not fall to zero and generally does not go below 10%.

Valuations of 90% or 100% are not a guarantee of the potential to survive. No species is adapted to all cultural or environmental conditions found in the Commonwealth. Significant variation often exists between individuals belonging to the same species, even when they are grown under the same cultural conditions. Some of these variations can be identified as different cultivars of the same species or interspecific hybrids not listed in this publication. It is the responsibility of the evaluator to identify genetically influenced factors and to assess the suitability of an individual for the site, determine the environmental history of the site, and how these conditions could have potentially influenced the growth and development of the individual plant being assessed.

These values have been organized alphabetically by botanical name and by percent value. The most frequently used common names are included in both lists. The list by percentage values may be useful in developing a landscape plan which makes use of species known to be successful in the region. Species diversity is important in developing a healthy, sustainable landscape and urban forest. The target should be that the community and region should not include more than 10% of any genus. Using this list to make selections does not negate the need to do an accurate site assessment or determine the cultural requirements of species.

While it is widely assumed that we are in a period of climate change, it is not possible to accurately determine future environmental conditions, *Acts of God*, new diseases and insects, or other cultural challenges that may occur. This guide was developed based on a species' history and the observations of the professionals responsible for developing these values.

Questions on the suitability of a species for culture in your location should be directed to your county Cooperative Extension Agent for Horticulture or Agriculture and Natural Resources or green industry professional. Assistance in developing a valuation related to property loss can also be obtained from an International Society of Arboriculture, Certified Arborist® (www.TreesAreGood.org) or American Society of Consulting Arborists, Registered Consulting Arborist® (<http://www.asca-consultants.org>) in conjunction with legal counsel.

Corrections to this manual should be directed to the KAA Tree Valuation Committee chair: Dr. William M. Fountain  
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[Click here for the valuations by botanical name](#)

[Click here for valuations by percent group](#)

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