

Allometric Coefficients for Common North American Trees

(Using Tree Diameter and Allometry Coefficients to Calculate Tree Biomass of Common North American Trees)

Tree Species	Coefficient a	Coefficient b
Ash	0.16	2.35
Aspen	0.05	2.51
Balsam fir	0.07	2.50
Basswood	0.09	2.35
Beech	0.20	2.39
Birch, Black/Sweet	0.06	2.66
Birch, Yellow	0.09	2.59
Cedar, Red	0.10	2.30
Cedar, Northern White	0.09	2.23
Cherry, Black	0.07	2.62
Cherry, Sweet	0.16	2.19
Flowering dogwood	0.08	2.63
Elm, American	0.06	2.66
Elm, slippery/red	0.06	2.66
Hackberry	0.08	2.63
Hemlock	0.06	2.45
Hickory, mockernut	0.08	2.63
Hickory, pignut	0.08	2.63
Hickory, shagbark	0.08	2.63
Hop hornbeam	0.08	2.63
Hornbeam	0.08	2.63
Locust, Black	0.08	2.63
Maple, Red	0.09	2.51
Maple, Sugar	0.21	2.53
Oak, black	0.09	2.51
Oak, chestnut	0.05	2.73

Oak, red	0.11	2.46
Oak, white	0.06	2.69
Pine, white	0.16	2.14
Pine, Red	0.78	2.38
Sumac, Staghorn	0.08	2.47

Sources of data:

*Yale University - <http://www.yale.edu/fes519b/saltonstall/biomass2.html> - estimate

*Maria Janowiack, Northern Research Station, USDS

Note:

* Values have been rounded down to two decimal places for the purpose of this activity.

* Values of allometric coefficients may change as forestry scientists continue to refine their methods.