

Quaking Aspen

Populus tremuloides

Common name:

Quaking Aspen, Trembling Aspen, Aspen Poplar, Popple

Pronunciation:

pop-U-lus trem-u-LOY-dez

Family:

Salicaceae

Genus:

Populus

"Of all our trees, none is more talkative than this. A breeze that is barely felt on the cheek will set the foliage of the Trembling [Quaking] Aspen into a panic whispering. Almost all Aspens, Poplars, and Cottonwoods rustle somewhat, but the most restless foliage is that of those species of *Populus* which have the ribbon-like leafstalks longer than the blades themselves and flattened contrary to the general hang or plane of the leaf blades, with the result that the stalk acts like a pivot so that the blades cannot but turn in every breath of the wind."

"In the evolution of the forest, and the crises that come to it through axe and fire, Trembling [Quaking] Aspen plays an indispensable role. Critics may call it a short-lived tree, prey to many diseases, with weak, soft wood, unworthy to succeed such noble predecessors as Pine and Oak. But its seedlings can take hold even in burned-out and denuded soil; tolerant of light and drought, wind and cold and heat, they spring up by the millions. Though the viability of the seed is of short duration, its tiny germs of life are produced in such numbers and carried so far in their downy wings over plains, over mountains, over barrens, that perpetually the Trembling [Quaking] Aspen is restocking the land that man has ruined."

(excerpts from Donald Culross Peattie, *A Natural History of Trees of Eastern and Central North America*)

Quick ID Tips:

- Pale whitish, smooth trunk with numerous dark branch scars
- Fluttering green leaves with silvery undersides, small-toothed margins, and flattened leaf stalks
- Bright yellow in the fall

Details:

- Broadleaf deciduous tree that grows to 40-50 ft. that is pyramidal and narrow in shape when young; long trunk and narrow, rounded crown when mature. An "iconic" feature of northern and montane forests across North America from Maine to Alaska.

- Bark is thin, smooth greenish white to cream colored, furrowed dark brown or gray in old age.
- Leaves are alternate, simple, thin, ovate to orbicular, 2-4" long, finely toothed, lustrous dark green above, glabrous and silvery-looking below. Candle yellow color in the fall. Laterally flattened petioles allow leaves to flutter in the slightest breeze (to "quake"). Scientists speculate that the fluttering allows this tree to rid itself of excess moisture.
- Male and female flowers appear in long slender catkins that appear before the leaves. Male catkins are at first about 3 cm long and lengthening to 8 cm before falling off, the small flowers are tiers of red stamens mixed with long, silky hairs. The female flowers are in slender, pendulous catkins that lengthen to 10 cm and develop into a string of green fruit capsules, each about 1/2", containing 10 minute seeds embedded in cottony fluff which aids in wind dispersal of the seeds.
- Prefers sun or partial shade and is especially found in moist habitats. Grows in many types of soil, from loamy sand to clay. Individual trees are fast growing and relatively short-lived, approximately 60 years. However, underground stems from which clonal groups of Quaking Aspens emerge can be over 200 years old. The "Pando" Quaking Aspen clonal forest in Utah is reputed to be around 90,000 years old.
- Hardy in USDA Zones 1-6. The largest native range of any tree in North America from Maine to Alaska and south to Tennessee and Idaho.
- In their habitat, quaking aspen forms clones connected by a common parent root system. Since trees are typically dioecious (i.e., male and female flowers on separate plants), a given clone may be either male or female. However, some clones produce both male and female flowers. In the West, quaking aspen stands are often even-aged, originating after a single top-killing event.
- *tremuloides*: *tremula*, quaking, trembling, *-oides*, like the preceding quality



summer foliage



fall foliage



leaf



leaves



emerging male catkins, spring



male catkins



female catkins



female catkins, seed release



trunk, bark with branch scars



buds



winter twigs and buds

Source:

- Oregon State University Landscape Plants, <https://landscapeplants.oregonstate.edu/plants/populus-tremuloides>
- Charles Fergus, *Trees of New England, A Natural History* (Globe Pequot Press 2005)
- David Sibley, *The Sibley Guide to Trees* (Knopf 2009)