

SALICACEAE Willow Family  
Order Salicales

Trees and shrubs, predominantly of north temperate areas. Tree and tall shrub species are significant elements in riparian habitats for both succession after natural disturbance and for wildlife habitat and forage. In alpine and arctic habitats, dwarf shrub species are very common.

Simple, stipulate (bearing stipules) leaves alternately arranged on woody stems. Flowers are minute, unisexual, reduced, and arranged in catkins which often emerge before the leaves (our pussy willows!). Flowers consist of either a superior pistil (1-2 carpels), or of 2 or more stamens, and each reduced flower is subtended by a single, small, ciliate and/or pubescent bract. In *Salix* there are one or two nectary glands at the base of each flower which produce nectar and scent to attract insects, facilitating pollination. *Salix* also has a single bud scale; often diagnostic for winter twig identification. *Populus* has no nectaries, has several bud scales, and the buds often exude balsam, a fragrant, sticky substance that is a harbinger for spring in interior Alaska. Capsules open to release numerous tiny seeds having a tuft of hairs for wind dispersal. All species are dioecious, having staminate and pistillate catkins borne on separate plants.

Uses include lumber, ornamentals, revegetation, and medicinal (balsam and salicylic acid). *Salix* is a taxonomically difficult group, having both known and suspected hybridization, and displaying extreme morphological variation in response to habitat, disturbance, and browsing. Collecting pistillate catkins and recording plant height greatly facilitates identification later.

New terms: aments, bracts, precocious.

*Salix* (willows), *Populus* (cottonwood and aspen).

