

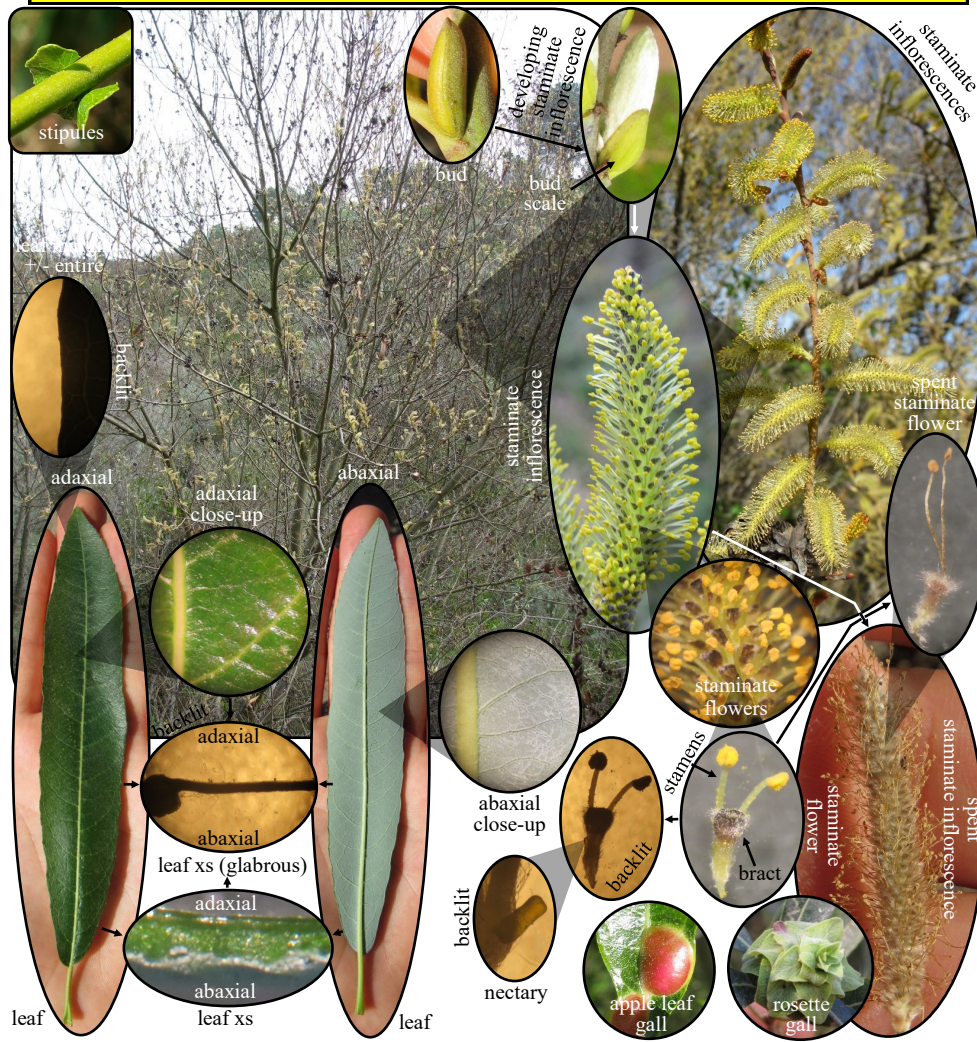
Arroyo Willow (*Salix lasiolepis*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May

Salix lasiolepis is a perennial tree or large shrub. It is found throughout the peninsula within canyons and along streams. The plant is dioecious and winter deciduous. The bark of the trunk is deeply furrowed. The stems are often flexible and can range in color from yellow, yellow-green, or yellowish-red brown. The stems can also be glabrous to hairy. The stipules of the leaves are generally leaf-like and the blades of the mature leaves are elliptic or obovate. The tip of the mature leaf blade is acute to convex and the margins of the blade can be entire, sinuate or minutely serrated. The leaves are bicolor with the adaxial side being a dark to light green color. The adaxial side is also glabrous. The abaxial side of the leaf is glaucous in color and it is also glabrous to hairy. The inflorescence is a catkin. The staminate inflorescence is many



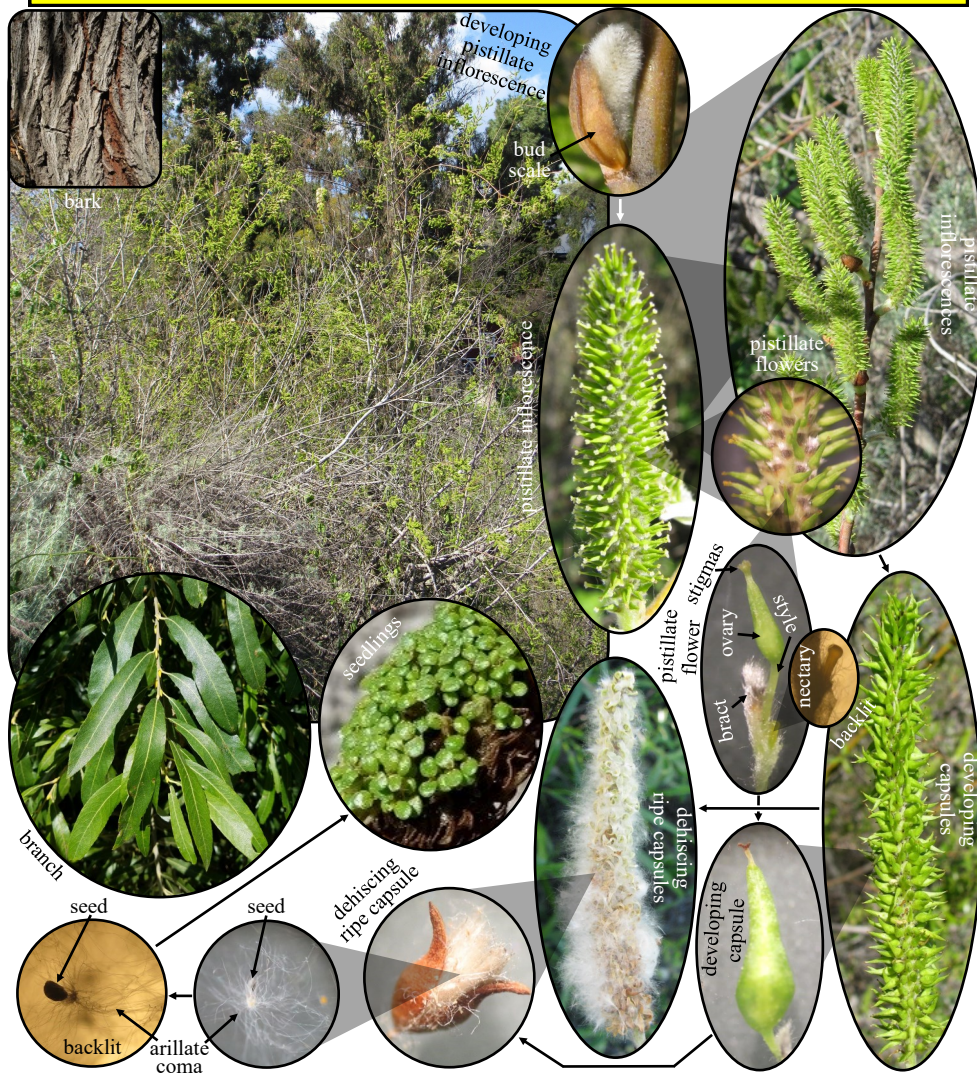
Arroyo Willow (*Salix lasiolepis*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May

flowered with the staminate flowers having 2 stamens and the perianth reduced to an adaxial nectary. The pistillate inflorescence is many flowered with the pistillate flowers having a glabrous ovary (ovary pyriform) that is stalked, has 1 style, 2 stigmas that are 2-lobed, and a perianth that is reduced to an adaxial nectary (nectary oblong to flask-shaped). The fruit is a capsule that is 2-valved. The seed is very small, blackish brown, and is surrounded by an arillate coma of long silky hairs (which aids the seed in wind dispersal). Two galls are unique to this willow species and can help aid in identification, they are the apple leaf gall and the rose gall. The apple leaf gall is made by a sawfly (*Pontania californica*) and the rose gall is made by a midge (fly)



Arroyo Willow (*Salix lasiolepis*)

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Flowers: February - May

Cecidomyiidae. Willows have the incredible ability to resprout after many forms of disturbance even when trees have been cut up into many pieces. Cuttings of branches will also resprout roots when left in water.



resprouting after fragmentation of the main trunk



roots in the water



can form large trees with stout trunks

Arroyo Willow (*Salix lasiolepis*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May

overall
(summer)



leaves change
to yellow in
fall and then
drop off



overall
(winter)

Arroyo Willow (*Salix lasiolepis*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May



during early summer the mass
release of seeds with there long silky hairs
makes it look like there is
snow on the ground



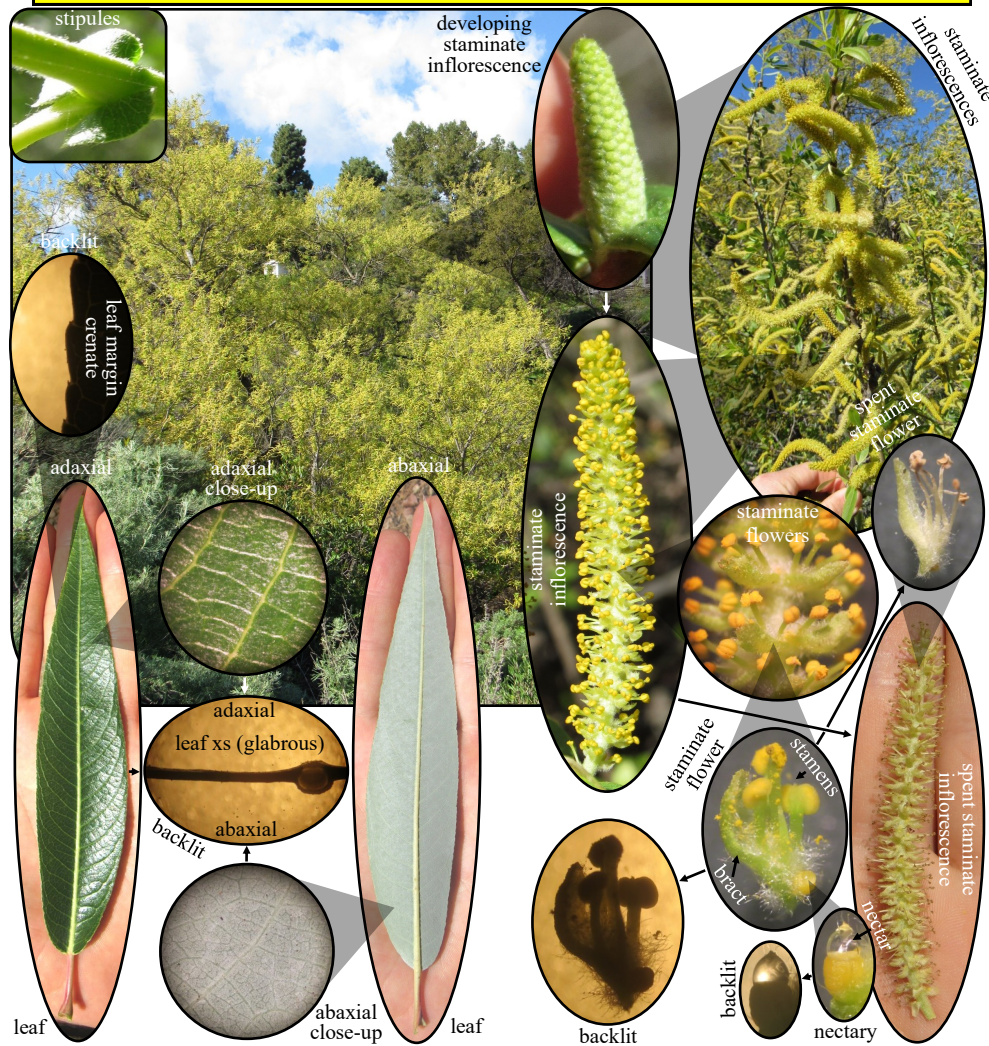
Red Willow (*Salix laevigata*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: December - June

Salix laevigata is a perennial tree. It is found throughout the peninsula in riparian areas. The plant is dioecious and winter deciduous. The bark of the trunk is deeply furrowed. The stems are often flexible and can range in color from yellow to a red-dish brown color. The stems are also hairy when young and with age become glabrous except for at the nodes. The stipules of the leaves are generally leaf-like and usually glandular. The blades of the mature leaves are narrowly oblong, narrowly elliptic, lanceolate, or obovate. The tip of the blade can be acuminate, acute or caudate. The margins of the leaves are usually crenate but can be entire or finely serrulate. The leaves are bicolor with the adaxial side being glabrous and a glossy green color. The abaxial side of the leaf is glaucous and glabrous to somewhat hairy. The



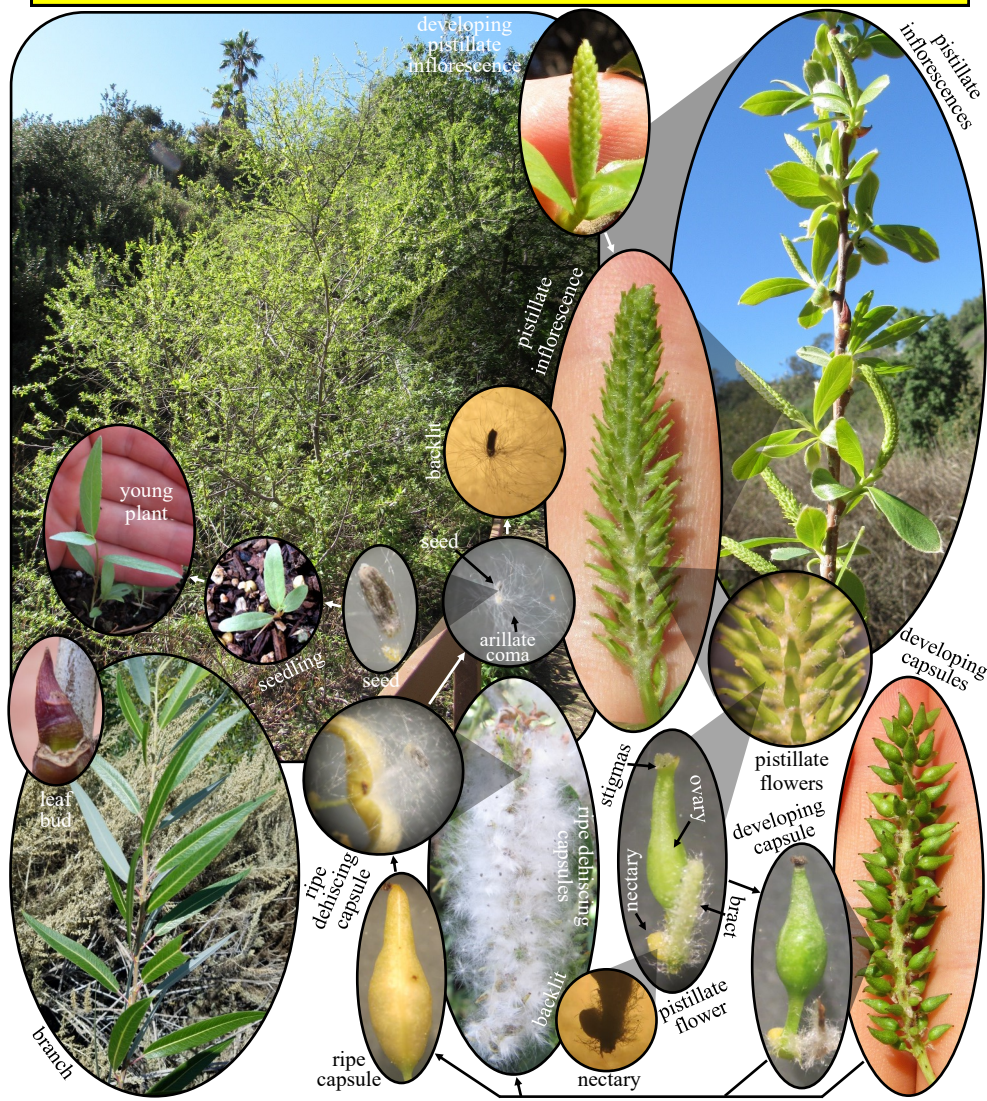
Order: Malpighiales
Family: Salicaceae (Willow Family)
Flowers: December - June

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: December - June

inflorescence is a catkin. The staminate inflorescence is many flowered with the staminate flowers having 3-7 stamens and nectaries on the abaxial and adaxial side. The pistillate inflorescence is many flowered with the pistillate flowers having a glabrous ovary (ovary can be pyriform, obturbinate, or ellipsoidal) that is somewhat stalked, has 1 style, 2 stigmas that are 2-lobed, and a perianth that is reduced to an adaxial nectary (square nectary). The fruit is a capsule that is 2-valved. The seed is very small, blackish brown and is surrounded by an arillate coma of long silky hairs, which aids the seed in wind dispersal.



Red Willow (*Salix laevigata*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: December - June



willows are prolific seeders making the area around the trees look like it has been snowing (white fluff is all of the arillate coma that is attached to the seeds)

handful of seeds



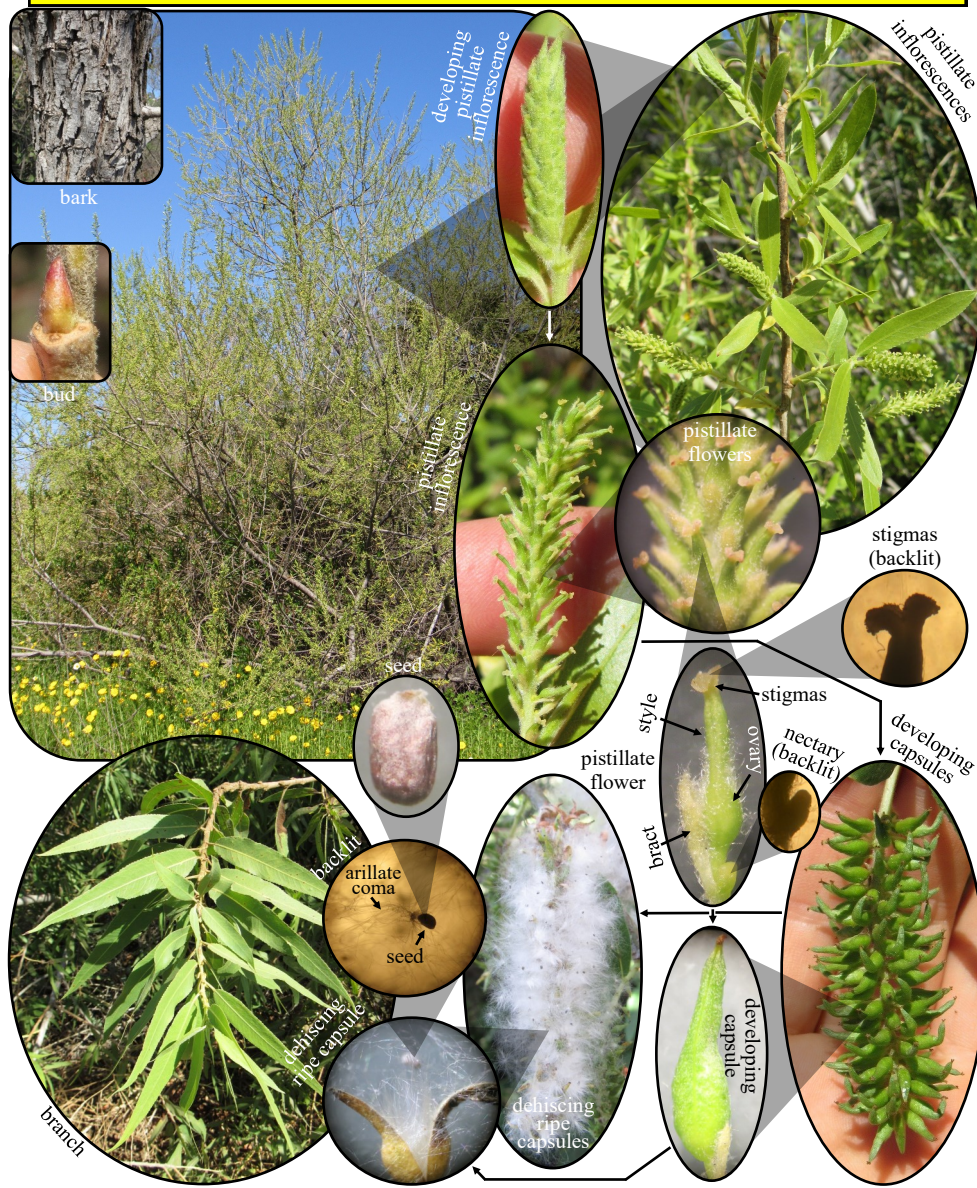
Black Willow (*Salix goodingii*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May

ence is many flowered with the pistillate flowers having a glabrous or hairy ovary (ovary can be pyriform) that is usually stalked, has 1 style, 2 stigmas that are 2-lobed, and a perianth that is reduced to an adaxial nectary (square nectary). The fruit is a capsule that is 2-valved. The seed is very small, grayish brown, and is surrounded by an arillate coma of long silky hairs, which aids the seed in wind dispersal.



Black Willow (*Salix goodingii*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May

overall
(summer)



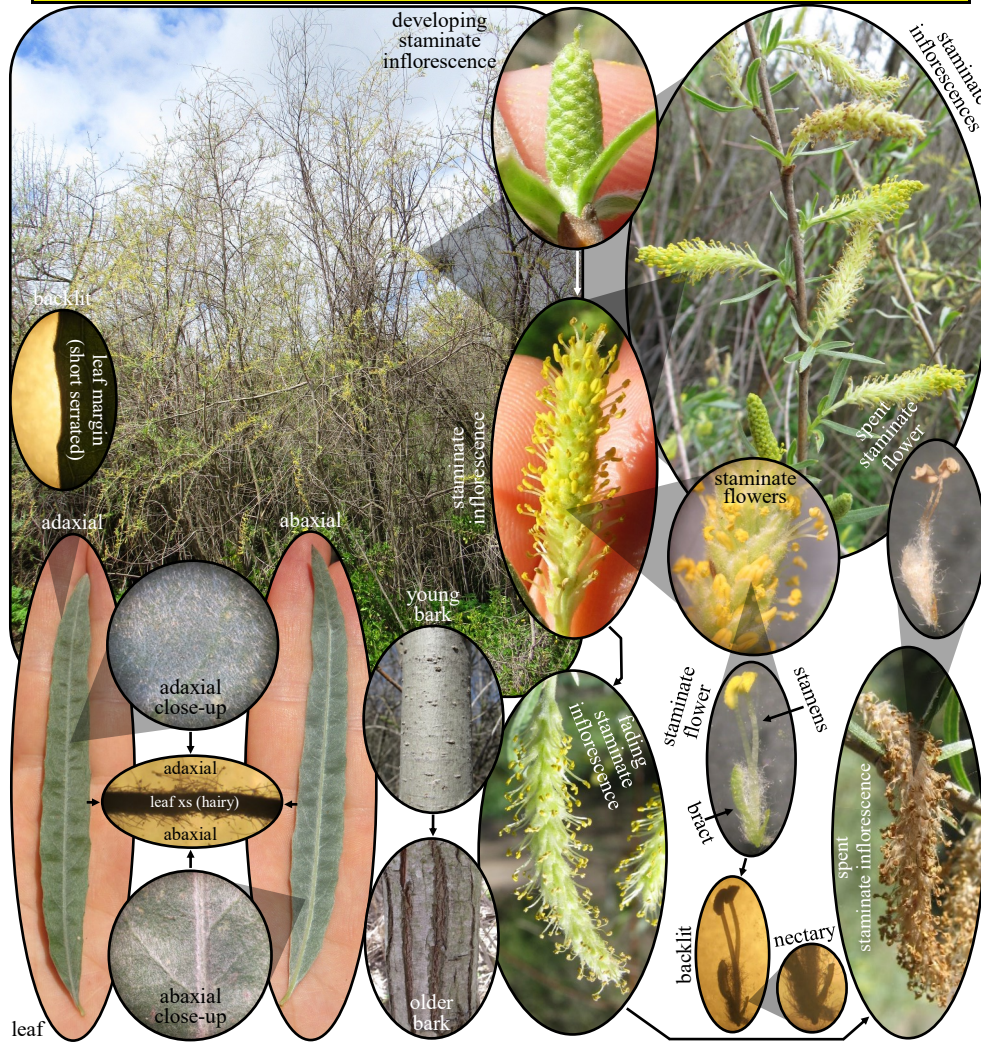
Sandbar Willow (*Salix exigua*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May

Salix exigua is a perennial shrub to tree. It is clonal by root-shoots. It has only been found in one location on the peninsula. The plant is dioecious and winter deciduous. The stems range in color from yellow to a reddish brown. The stipules of the leaves are leaf-like and not glandular (young leaves usually lack stipules). The blades of the mature leaves are linear to strap shaped and hairy with dense silky straight to wavy hairs. The leaves are not bicolor and both the adaxial and abaxial sides are a bluish-gray color. The margins of the leaves are usually short serrated. The inflorescence is a catkin and the inflorescences are produced with or after leaf formation. The staminate inflorescence is many flowered with the staminate flowers having 2 stamens. The pistillate inflorescence is many flowered with the pistillate flowers having usually a



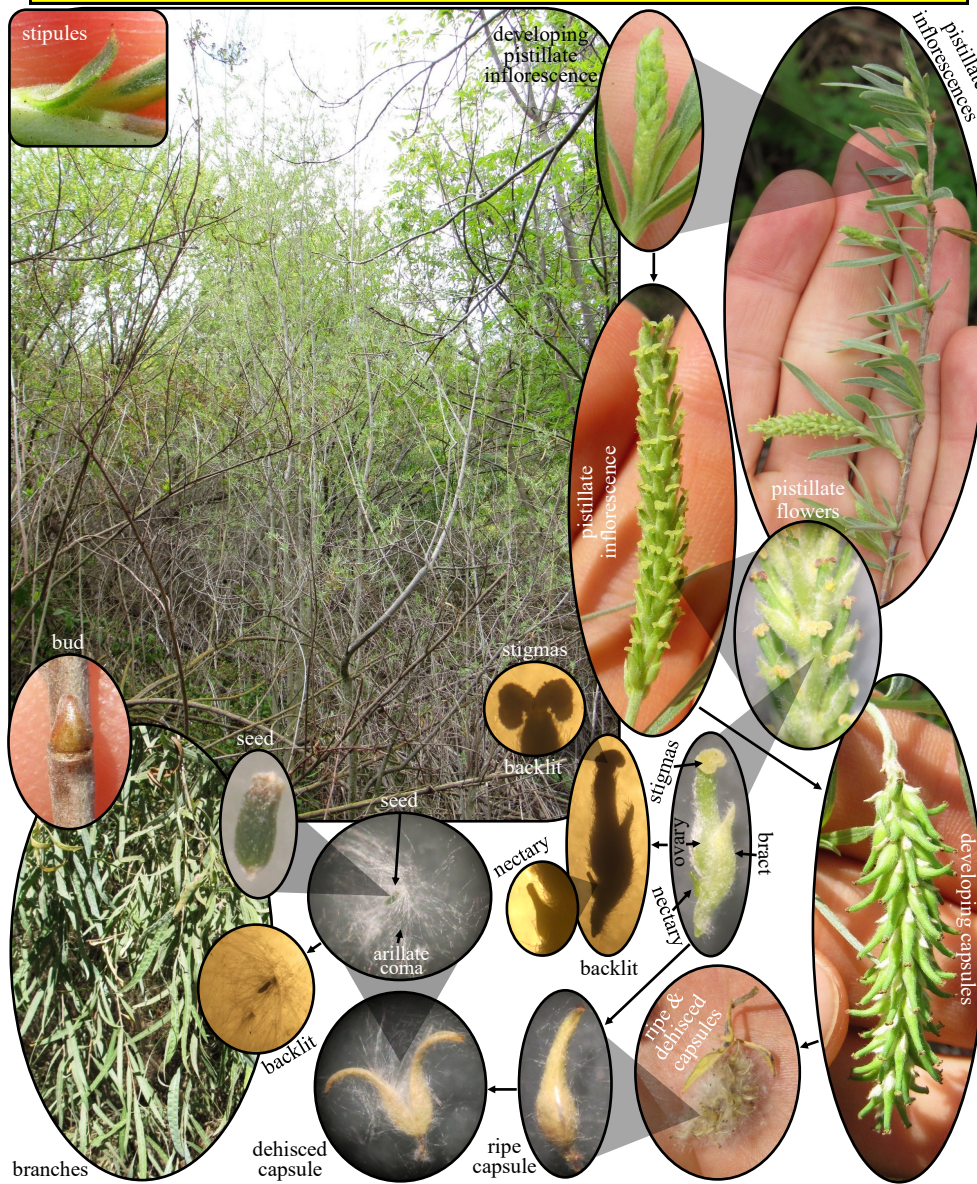
Sandbar Willow (*Salix exigua*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May

hairy ovary. The ovary is generally pyriform, is stalked, has 1 style, and flat stigmas that are spreading. The stigmas and bracts of the pistillate flowers are also deciduous. The fruit is a capsule that is 2-valved. The seed is small, brownish, and is surrounded by an arillate coma of long silky hairs, which aids the seed in wind dispersal. This plant will form large thickets. Female plants seem to be rare.



Sandbar Willow (*Salix exigua*)

Order: Malpighiales

Family: Salicaceae (Willow Family)

Flowers: February - May

overall (summer) - forming large thicket

