

Big sagebrush

Common Name

Big sagebrush

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Scientific Name

Artemisia tridentata

Scientific Pronunciation

ar-teh-MEEZ-ee-uh try-den-TAY-ta

Plant Family

[Asteraceae](#)

Plant Origin

[Native](#)

Plant Type

[Shrub](#)

Typical Bloom (varies by elevation)

[July](#)

Additional Common Names

Tall sagebrush

Big sagebrush is a strongly scented, woody evergreen shrub. It is the most abundant shrub in the shrub-steppe because it has adapted to a wide range of environmental conditions. It usually grows about four feet tall, but can grow taller than ten feet in areas with deep soil and more moisture. It has a common lifespan of forty to fifty years, although some plants live as long as one hundred years. The fuzzy gray-green leaves have three lobes at the tip, like a trident. Tiny hairs covering the narrow leaves give them a silky sheen and protect sagebrush from drying out in wind and heat. The golden-yellow flowers are so small you have to look closely to see them.

Big sagebrush has two types of leaves, with smaller and softer non-lobed leaves appearing in early winter which drop off during the drought season. More leaf surface area during the moister conditions of early spring results in more rapid plant growth. As the summer heat intensifies, big sagebrush drops the soft leaves and conserves the water the plant would have lost through them. It also has two types of roots: shallow, widely dispersed spreading roots that absorb rain rapidly before it can evaporate, and course deep roots that draw water from deeper reservoirs underground.

Big sagebrush is often killed by fire and relies on wind-blown seeds from outside the burned area for re-establishment. Cheatgrass has invaded much of the sagebrush habitat, and if left unchecked could possibly create a fire cycle that is too frequent to allow sagebrush to re-establish itself.

Many big sagebrush plants have rounded swellings, lumps or bumps on certain leaves, stems or stalks. These are not fruits but galls. A gall is a swelling growth of new plant tissue produced by the plant in response to an insect larva burrowed in the leaf. Galls vary enormously in texture and shape, and do no harm to the host plant.

Big sagebrush has a sharp odor, especially after a rain, like the herb sage but it is unrelated to culinary sage and has a bitter taste. The odor may discourage browsing. The chemicals responsible for the odor may cause dermatitis in sensitive individuals.

Native Americans had many uses for big sagebrush. It was an important fiber plant used in clothes, saddle blankets, arrow cases, sandals, and rope. A yellow dye was extracted from the flowers and leaves, it was a source of firewood, medicine, insect repellent, and it was also used in ceremonies. An aromatic plant, it was used in sweat lodges for respiratory ailments or as air fresheners. Leaves and twigs were boiled to make a medicinal drink for colds or sore throats. People with runny noses stuffed leaves into their nostrils to stop the drip.

