

Nature's Notebook Phenophase Photo Guide



Prosopis velutina velvet mesquite



Why Observe?

Species marked for inclusion in the *Nature's Notebook* monitoring program have been identified by scientists or natural resource managers as ecologically important for the Sonoran Desert region. Many Sonoran Desert species have not been observed nor studied as closely as other species in the United States. They are the standard bearer of the Sonoran Desert Region.

Tips for Identification

Prosopis velutina is a perennial shrub or tree that can grow to 30 feet tall with a spreading rounded crown. The trunk is rough- textured and has shaggy gray to brown bark. The branches of velvet mesquite are often gnarly and crooked with spines. Its semi-deciduous leaves are divided into many leaflets. Tiny, fragrant, cream to yellow flowers occur in a catkin-like raceme. Its fruits are edible legumes (seed pods) that are flat and tan, sometimes streaked with red. Prosopis velutina is found below 5,500 feet in desert washes, canyons, slopes and mesas, in desert grassland, and sometimes with oaks. It prefers full sun and will tolerate cold to 5 degrees Fahrenheit. It does well in dry, hot climates and is drought tolerant. Its soil preference is adaptable, but it does best in deep alkaline, uniform soil. Velvet mesquite needs infrequent, deep water due to its deep, massive taproot system. Prosopis velutina is an important tree for wildlife. The seeds are eaten by small mammals, birds, and livestock. Some small mammals also consume the foliage. Various birds and other animals also use the tree for nesting, cover, and shade. In addition, honeybees prefer the flowers of velvet mesquite to make a sweet honey.

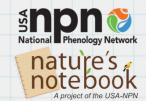


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Be aware there is variation from individual to individual within a species, so your plant may not look exactly like the one pictured. If you are uncertain whether or not a phenophase is occurring, report a "?" for its status until it becomes clear what you are observing after subsequent visits.



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Young leaves

One or more young, unfolded leaves are visible on the plant. A leaf is considered "young" and "unfolded" once its entire length has emerged from a breaking bud, stem node or growing stem tip, so that the leaf stalk (petiole) or leaf base is visible at its point of attachment to the stem, but before the leaf has reached full size or turned the darker green color or tougher texture of mature leaves on the plant. Do not include fully dried or dead leaves.

Flowers or flower buds

One or more fresh open or

unopened flowers or flower buds

are visible on the plant. Include

flower buds or inflorescences

that are swelling or expanding,

tightly closed and not actively

growing (dormant). Also do not

include wilted or dried flowers.

but do not include those that are



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Leaves

One or more live, unfolded leaves are visible on the plant. A leaf is considered "unfolded" once its entire length has emerged from a breaking bud, stem node or growing stem tip, so that the leaf stalk (petiole) or leaf base is visible at its point of attachment to the stem. Do not include fully dried or dead leaves.

Colored leaves

One or more leaves show some of their typical late-season color, or yellow or brown due to drought or other stresses. Do not include small spots of color due to minor leaf damage, or dieback on branches that have broken. Do not include fully dried or dead leaves that remain on the plant.

Open flowers

Ripe fruits

One or more open, fresh flowers are visible on the plant. Flowers are considered "open" when the reproductive parts (male stamens or female pistils) are visible between or within unfolded or open flower parts (petals, floral tubes or sepals). Do not include wilted or dried flowers.

One or more ripe fruits are visible

velutina, a fruit is considered ripe

mottled or flecked with maroon.

when it has turned tan, often

on the plant. For Prosopis



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Fruits

One or more fruits are visible on the plant. For *Prosopis velutina*, the fruit is a pod that changes from green to tan, often mottled or flecked with maroon.



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Phenophases not pictured: Falling leaves, Pollen release, Recent fruit or seed drop