

California Phenology Project: species profile for Blackbrush (*Coleogyne ramosissima*)



CPP site(s) where this species is monitored: Joshua Tree National Park



Photo credit: Stan Shebs

What does this species look like?

This perennial desert shrub grows up to 2 meters tall with short, stiff, branched stems that are spine-like at the tip. The grey bark turns black with age or when wet and the small leaves are aromatic. The flowers lack petals but the thick sepals remain when flowers open. The sepals are yellow on the inside and reddish on the outside.

When monitoring this species, use the USA-NPN *semi-deciduous trees and shrubs* datasheet.

Species facts!

- The CPP four letter code for this species is **CORA**.
- Member of the rose family.
- *Coleogyne* is Greek for "sheathed fruit" and *ramosissima* is Latin for "many branched".
- Spiny stems protect it from browsing herbivores.
- Depends on rodents for seed dispersal.
- Drought deciduous; it loses its leaves when water is highly limited.
- Primarily wind pollinated.
- Blackbrush is mast-fruiting and only produces fruit and seed in years of abundant resources.



Photo credit: Brewbooks (Flickr)



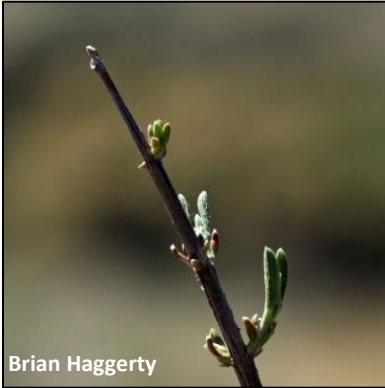
Photo credit: Brewbooks (Flickr)

Where is this species found?

- Mojave desert scrub and Pinyon-Juniper Woodland in the Upper Sonoran life zone.
- Associated with Joshua Tree and Mojave Yucca.
- Dry well-drained sandy, or rocky soil.
- Mesas, open plains, and foothills.
- Elevations between 750 and 2100 meters.

For more information about phenology and the California Phenology Project (CPP), please visit the CPP website (www.usanpn.org/cpp) and the USA-NPN website (www.usanpn.org)

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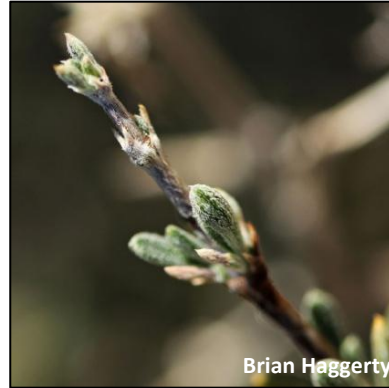


Brian Haggerty

Young leaves

Young leaves appear hairier and thinner than mature leaves.

Note: There is no petiole on CORA leaves! This may make this phenophase difficult to distinguish on this species.



Brian Haggerty

Leaves

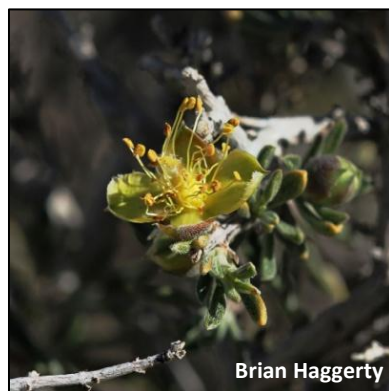
Similar to other species in Mediterranean and desert ecosystems, Blackbrush may respond to precipitation events with a flush of new leaf production. If water becomes unavailable after growth is initiated, however, then leaf expansion may be arrested, resulting in many small leaves on the plant. These responses to water availability (initiation of growth followed by arrested growth when resources give out) can be confusing for observers. If you are unsure of what you are seeing, do not hesitate to circle ? on the NPN datasheets. With more experience, observers may be able to distinguish between newly produced young leaves vs. old, small leaves. Throughout the year, take note of the differences between new and old leaves—color, texture, and size may all be used to identify young leaves!



Brian Haggerty

Flowers and flower buds

Be aware that this species does not produce flowers every year!

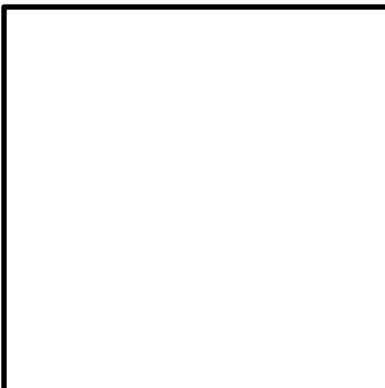


Brian Haggerty

Open flowers

These flowers appear singly and have both male and female parts.

Note: flower phenophases are nested; if you say Y to “open flowers” you should also say Y to “flowers or flower buds”.



Fruits

The fruit is a crescent shaped tiny capsule that changes from green to reddish brown; it drops from the plant when ripe.



Stan Shebs

Ripe fruits

The fruit is ripe when it is reddish brown.

Note: fruit phenophases are nested; if you say Y to “ripe fruits” you should also say Y to “fruits”.

Phenophases not pictured: **Recent fruit or seed drop**