# California Phenology Project: species profile for Chamise (Adenostoma fasciculatum)







**CPP site(s) where this species is monitored**: Golden Gate National Recreation Area, Santa Monica Mountains National Recreation Area



Photo credit: Barry Breckling

### What does this species look like?

This species is an evergreen shrub up to 4 meters tall. The small leaves are linear, shiny, oily, clustered, and are 4 to 10 millimeters long. The small flowers are 5 millimeters in diameter and white, found in clusters at the ends of branches. The flowers have 5 petals and 5 stamens.

When monitoring this species, use the USA-NPN broadleaf evergreen (no buds) datasheet.

## Species facts!

- The CPP four letter code for this species is
   ADFA.
- Chamise is a characteristic shrub of chaparral ecosystems.
- It is often dominant in hot and dry habitats.
- The oils from chamise were used by Native Americans for medicinal purposes, including the treatment of skin infections.
- Chamise is well adapted to fire and re-sprouts following burns.



Photo credit: Arnold Zane



Photo credit: KQED QUEST

# Where is this species found?

- Chamise is found in chaparral, on dry slopes, on ridges, and in woodland and forest communities.
- Found at elevations less than 1600 meters.
- Present in California and Nevada.

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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#### Young leaves

Young leaves are generally thinner and lighter colored than mature leaves.

Note: Because there is no petiole on ADFA

note: Because there is no petiole on ADFA leaves, this phenophase may be difficult to identify on this species! Similar to other species in Mediterranean and desert ecosystems, Chamise 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 the resources give out) can be confusing for observers. If you are unsure of what you are seeing, do not hesitate to circle? on the USA-NPN datasheets. With more experience, you may be able to distinguish between newly produced, small young leaves and small old leaves. As you observe this species throughout the year, take note of the differences between new and old leaves—color, texture, and size can all be used to identify young leaves!



# Flowers or flower buds

When monitoring flower or flower bud abundance for this species, count each inflorescence as a single flowering structure! For example, if there are two inflorescences with many flowers or buds each, then abundance should be recorded as <3.



#### Open flowers

Each flower has both male and female parts that are visible when the flowers open fully.

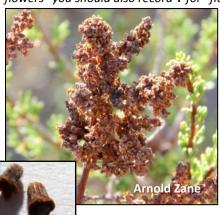
Proportion of open flowers should be recorded at the scale of individual flowers, not inflorescences

(i.e. count individual

**Fruits** 

The fruit is tiny and capsule-like; it changes from green to rusty-brown or brown, and then drops from the plant when ripe.

**Note**: flower phenophases are nested; if you record **Y** for "open flowers" you should also record **Y** for "flowers or flower buds"



← Ripe fruits close-up

### Ripe fruits

The fruit is considered ripe when it is dry and rusty-brown or brown.

Note: fruit phenophases are nested; if you record Y for "ripe fruits" you should also record Y to "fruits"

Phenophases not pictured: Recent seed or fruit drop