



Nature's Notebook Phenophase Photo Guide

> Senna covesii Coues' cassia



# 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**

It is found on desert plains and in sandy washes between 500 and 600 m above sea level and is very common in Joshua Tree National Park. The specific epithet honors ornithologist Elliott Coues.

It grows to 30-60 cm tall and is leafless most of the year. The leaves are pinnate, 3-7 cm long, with two or three pairs of leaflets (no terminal leaflet); the leaflets are elliptical, 1.0-2.5 cm long. The flowers are yellow in color, with five rounded petals about 12 mm long.

https://en.wikipedia.org/wiki/Senna\_covesii

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.

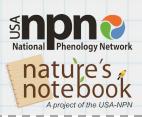


Dionna Hatch. CC BY-NC-SA 4.0



Dionna Hatch. <u>CC BY-NC-SA 4.0</u>

This Phenophase Photo Guide has been vetted by the USA-NPN NCO. It is appropriate for use as a supplement to the Nature's Notebook phenophase definition sheet for this species.



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# Image Needed email photos@usanpn.org

Initial growth

New growth of the plant is visible after a period of no growth (winter or drought), either from aboveground buds with green tips, or new green or white shoots breaking through the soil surface. Growth is considered "initial" on each bud or shoot until the first leaf has fully unfolded. For seedlings, "initial" growth includes the presence of the one or two small, round or elongated leaves (cotyledons) before the first true leaf has unfolded.



Dionna Hatch. CC BY-NC-SA 4.0

## Leaves

One or more live, fully unfolded leaves are visible on the plant. For seedlings, consider only true leaves and do not count the one or two small, round or elongated leaves (cotyledons) that are found on the stem almost immediately after the seedling germinates. Do not include fully dried or dead leaves.



Dionna Hatch. <u>CC BY-NC-SA 4.0</u>

#### 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, but do not include those that are tightly closed and not actively growing (dormant). Also do not include wilted or dried flowers.



Sara Schaffer. CC BY-NC-SA 4.0

#### **Open flowers**

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.



Dionna Hatch. CC BY-NC-SA 4.0

#### Fruits

One or more fruits are visible on the plant. For *Senna covesii*, the fruit is a pod that changes from green to greenish-tan or reddishtan to light brown and splits open to expose the seeds. Do not include empty pods that have already dropped all of their seeds.



Dionna Hatch. CC BY-NC-SA 4.0

## **Ripe fruits**

One or more ripe fruits are visible on the plant. For *Senna covesii*, a fruit is considered ripe when it has turned light brown and has split open to expose the seeds. Do not include empty pods that have already dropped all of their seeds.

## Phenophases not pictured: Recent fruit or seed drop