



Nature's Notebook Phenophase Photo Guide

Ferocactus cylindraceus Cylindrical Barrel Cactus



McDowell Sonoran Conservancy

Why Observe?

Since 2017 the Conservancy has been monitoring the phenophases of six plant and one animal species at three locations in the McDowell Sonoran Preserve. The project has two goals: 1) see if the timing of phenophases are changing, 2) gather phenology data on a spectrum of plants found in the Sonoran Desert. In 2023, *Ferocactus cylindraceus*, aka Cylindrical or California barrel cactus was added to the study.

Observer Notes

All phenophases occur on the top circle of the plant and multiple phenophases can be occurring at the same time. Avoid selecting very tall plants.

Two attributes to observe in fruit: color and plumpness.

Color - Once the flower has wilted the fruit will appear brownish or green and then yellow or red. The yellow and red fruit are the ripe fruit. Once the ripe fruit dries up it will turn tan or black. At this point no longer count it as a fruit or ripe fruit. If the entire fruit cannot be observed, make your fruit/ripe fruit decision based on the predominant color that you see on the portion of the fruit you are observing.

Plumpness - To be a fruit or a ripe fruit, the fruit must be plump. Do not count fruit that has lost its plumpness even if it retains its color.

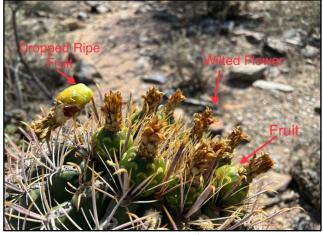
The phenophase "Recent fruit or seed drop" is not relevant for this species, so do not report anything for this phenophase.

Do not count dried up fruit.

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.



Wendy Rennert. Public domain.



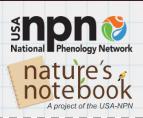
Jerry Holden (Above & Below). Public domain.





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.

Last updated: January 2023



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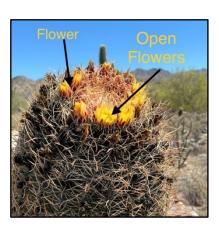






Jerry Holden. Public domain.

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.



Jerry Holden. Public domain.

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.



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Fruits

One or more fruits are visible on the plant. For *Ferocactus cylindraceus*, the fruit is berry-like, somewhat resembling a small pineapple, and changes from green or brown to yellow or red.



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Phenophases not pictured: Recent fruit or seed drop

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Ripe fruits

One or more ripe fruits are visible on the plant.

For *Ferocactus cylindraceus*, a fruit is considered ripe when it has turned yellow or red.