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## resources & more information

*for community members:*

[www.pollinator.org](http://www.pollinator.org)  
[www.citizenscience.org](http://www.citizenscience.org)

*for educators:*

[www.fws.gov/pollinators](http://www.fws.gov/pollinators)  
[pollinator.org/education.htm](http://pollinator.org/education.htm)

*for researchers:*

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# Citizen science

*pollinator*



**Hot  
SPOTS**

pollination counts!

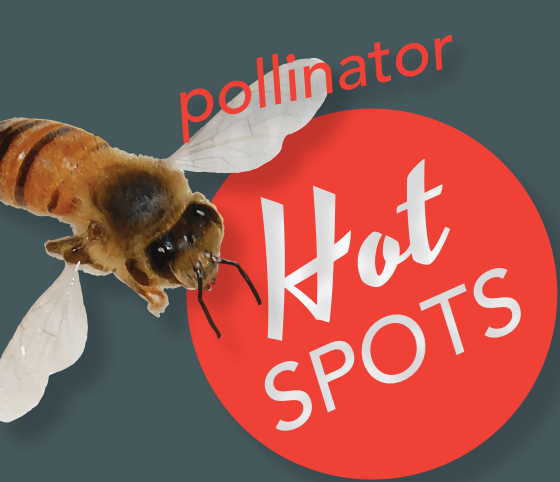


**Thank you**

for helping us better  
understand how we  
impact our plants  
and pollinators!

ARIZONA-SONORA  
**DESERT  
MUSEUM**

2021 N. Kinney Road  
Tucson, AZ 85743  
[www.desertmuseum.org](http://www.desertmuseum.org)  
(520) 883-1380



**Human activities have changed the availability and distribution of many desert resources, including water.**

- How do native species such as pollinators respond to these changes?
- More pollinators = more seeds. By counting seeds we may be able to tell where there are more or fewer pollinators.
- What parts of the Sonoran Desert currently have high pollinator densities, and why?

*You can help us find out!*



New fruits will appear on the plant in October.  
Pick a fruit between the center and the edge.

## How can I help?

1. **Find** a barrel cactus
2. **Measure** the plant
3. **Pick** a fruit
4. **Count** the seeds
5. **Send** us the seed count, the plant location, and the plant height.



Species: fishhook barrel cactus

Slightly curved spines shaped like fishhooks

Shin-to-shoulder high plant



### *How do I measure the plant?*

A yardstick works well. Try to measure from the base to the crown. Measure the plant's total height, even if that means you have to hold the yardstick at a slant.

### *How do I pick a fruit?*

Luckily, barrel cactus fruits don't have spines, but there are spines around them. Wait until the fruits are bright yellow, when they come off most easily. Try not to pick a fruit right at the center or edge of the crown—aim for in between to get an average size.



### *How do I count the seeds?*



The seeds are easiest to count when they are dry. Cut the fruit open and leave it somewhere to dry, like on a windowsill. Once it's dry, shake the seeds out into a bowl or cup. Count a small pile at a time so you can keep track.

### *Submitting your data:*

Data entry is easy! Find the datasheet at: [www.desertmuseum.org/hotspots](http://www.desertmuseum.org/hotspots).

Type in the location of the barrel cactus (either the GPS location or as much detail as you can), its approximate height, and the number of seeds. Finally, check the box for whether the plant is watered (if you know the answer).

