Coryphantha recurvata at Sycamore Canyon

ycamore Canyon is one of the few habitats of *Coryphantha recurcata*, a species endemic to the Parajito, Atascosa, and Tumacacori Mountains of Santa Cruz County in southern Arizona¹—and whose habitat extends a few miles south into Sonora, Mexico². The drive between Tucson and Sycamore Canyon is quite scenic (see "Getting There"). Along I-19 there are lots of saguaros (including a cristate specimen you'll spot even at 75 MPH), many gorgeously purple and purplish-red prickly pears (none of which I will try to identify after reading Powell & Weedin³), lots of chollas, and numerous gigantic barrel cacti—both *Ferocactus wislizeni* and *F. emoryi*. The cacti, however, become less noticeable as the elevation increases along the drive south; I-19 follows the Santa Cruz River, which means more trees and fewer cacti. On SR 289, you will see many *Ferocactus wislizeni*,

▼ *Sapindus saponaria* (Western Soapberry Tree) and our 2 m tall tent. This is a typical scene along upper Sycamore Creek before the stream bed narrows. *Sapindus saponaria* is clonal, with many of the specimens here probably arising from the same rootstock.





Top *Coryphantha recurvata*. This is the only specimen that I saw growing so exposed. It is only about 5 cm in diameter.

Bottom Coryphantha recurvata. This is a typical, many-stemmed specimen, although atypical insofar as it was not covered by grasses and other herbaceous plants. C. recurvata has the largest stems for this genus. The largest stems here are 12 cm in diameter, and the entire clump is about 35 cm across. At this locale, individual stems seldom get any bigger, although a few clumps were approximately twice this diameter. At other locales, the plants purportedly grow much larger, with individual stems being 20 cm tall and 20 cm in diameter with clumps exceeding one meter across. Fouquieria splendens, Ervthrina flabelliformis. and Echinocereus rigidissimus-all without having to stop your car. Ferocactus wislizeni disappears just east Peña Blanca at the eastern bajada (base of the slope) of the Parajito Mountains. Fouquieria splendens and Erythrina flabelliformis are prevalent all along FS 39 and throughout the Paraiito Mountains, but seem to disappear at the mountain's western bajada. Echinocereus rigidissimus is occasionally visible, but never seems that numerous, at least while driving.

A few years ago, Gene Joseph of Living Stones Nursery and Plants for the Southwest in Tueson told me that Coryphantha recurvata was plentiful on the hill by the Sycamore Canyon parking lot and trailhead. This came as a surprise, as I was married in Sycamore Canyon several years before and had never noticed this distinctive species along the hike or by the trailhead. So on 11 June 2005 I climbed the rather steep hill immediately adjacent to and southeast of the parking lot but found no specimens of C. recurvata. Other than a few chollas and prickly pears, there were no other cacti on the hill. As a consolation I saw lots of beautiful Madrones (Arbutus arizonica) with their shiny red bark.

✓ Dasylirion wheeleri (Sotol) at the base of an oak tree. This is a typical view at this habitat of C. recurvata. D. wheeleri can be found throughout much of southern Arizona and New Mexico.

♥ Arizona's common Cane Cholla, *Cylindropuntia spinosior*. To the east, central and eastern New Mexico, it is replaced by *Cylindropuntia imbricata*, whose flowers are more purple.



apparently contains about 50 plants ranging in size from (at least) two small seedlings, to a few single-headed individuals and clumps with from three to a dozen stems, which comprised the majority of plants. Much larger

That night we camped a short walk from the parking area under an enormous Western Soapberry (*Sapindus saponaria*) towering over out 2 m-tall tent. These trees are predominate in the area along Sycamore Canyon, maybe more so than the Sycamores. They are clonal (i.e., they spread vegetatively underground via runners) and house many birds in the hollows of their long arching branches. The following morning I woke up before sunrise to explore the area near the trailhead. Of course, Gene knew what he was talking about. It did not take long for me to find an impressive population of *C. recurvata* west of the parking area, on the far side of the creek.

This population of Coryphantha recurvata

clumps are said to exist, but not at this site.

C. recurvata is unmistakable, being by far the largest-stemmed species of *Coryphantha*, *Mammillaria*, or *Escobaria* in the United States. Heads can be as much as 15 or 20 cm in diameter and are often almost as tall. Each stem on the specimens at Sycamore Canyon, however, was wider than tall: never more than 10 cm in height but sometimes over 15 cm in diameter. They almost always grew in grass, making their golden-spined stems somewhat difficult to see amongst the desiccated leaves.

Although not listed as endangered or threatened under the US Endangered Species Act, *Coryphantha recurvata* is 'highly safeguarded'



To get to Sycamore Canyon from Tucson, Arizona, take I-19 south to State Road 289. Take SR 289 west for 9 miles to Forest Service Road 39. FS 39 begins at the Peña Blanco campground; you actually start this portion of the drive by going through the campground. Take FS 39 for 10 miles all the way across the Pajarito Mountains. Sycamore Canyon is on the western bajada of the Pajarito Mountains. The drive from I-19 to Sycamore Canyon takes roughly 45 minutes. SR 289 is paved; FS 39 is not, but it is in good condition. Incidentally, the place names 'Sycamore Canyon' and 'Sycamore Creek' are common in Arizona.

under the Arizona Native Plant Law¹. This means no collection is allowed. Fewer than fifty populations have been documented in Arizona, and far fewer are known from neighboring Sonora¹. Please respect the law and these plants.

he Sycamore Creek trailhead population of *C. recurvata* is also home to several other cacti and succulents. Interspersed with *C. recurvata* are one or two species of *Agave*, inlcuding *A. palmeri*, *Dasylirion wheeleri* (Sotol), and *Echinocereus rigidissimus*, the only cactus intermingling with the coryphantha. A stone's throw away are *Cylindropuntia spinosior* and *Yucca torreyana*.

It is also worth taking a walk along the stream of Sycamore Canyon to enjoy the many other succulents and beautiful sights. The well-trodden trail has lovely chollas (all of which appear to be Cylindropuntia spinosior) and a few prickly pear taxa. There are many more specimens of Echinocereus rigidissimus not far above the stream and a few Echinocereus coccineus clumps higher up, on the ledges overlooking the water. Representing the Agavaceae here are some Agave species, Dasylirion wheeleri, Yucca torreyana, and the bear grass, Nolina microcarpa. In the more mesic spots one can find large sycamores, cat-tails (Typha sp), plenty of Penstemon barbatus and a fair amount of poison ivy. I wandered into the poison ivy with shorts and sandals to get a photo of a Sonoran Mountain Kingsnake (Lampropeltis pyrmelana) but had less luck photographing a black-necked garter snake (Thamnophis cyrtopsis), which quickly slithered away.

REFERENCES

 Arizona Rare Plant Committee. undated, but first published in 1999. Arizona Rare Plant Field Guide.
Benson L. 1982. Cacti of the United States and Canada. Stanford University Press.
Powell AM, Weedin JF. 2004. Cacti of the Trans-Pecos and Adjacent Areas, Texas Tech University Press.



▲ Opuntia sp at Sycamore Canyon. ▼ A half kilometer downstream from Coryphantha recurvata the canyon turns, narrows, deepens and starts having more sycamore trees and spectacular rock formations.

