## Cacti along Vekol Wash in south-eastern Sonoran Desert National Monument

Root Gorelick visits an area of the Sonoran Desert National Monument and describes the range of succulent plants that can be seen there. Photography by the author and S. Bertram.

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estled between the Tohono O'odham Indian Reservation/Nation, Ak-Chin Indian Reservation and Goldwater Air Force Range is the Sonoran Desert National Monument, administratively created in 2000 by Bill Clinton under the Antiquities Act. Subsumed in the south-east corner of this national monument lies the former Table Top Wilderness area, which was itself only designated as a wilderness area in 1990. The

Sonoran Desert National Monument also subsumed the North and South Maricopa Mountains Wilderness areas. Table Top Wilderness is named for its highest peak, Table Top Mesa, which appropriately has a flat top that is roughly 15 hectares at an elevation of just over 1,300 metres (Figs. 1 & 2).

Table Top Mesa is reached by a pleasant two hour drive from Phoenix, Arizona. The second hour of this drive



Figure I View of Table Top Mesa (in the background) from the southwest



Figure 2 Table Top Mesa with ocotillo (Fouquieria splendens), creosote bush (Larrea tridentata), saguaro (Carnegiea gigantea), buck-horn cholla (Cylindropuntia acanthocarpa), and chain fruit cholla (Cylindropuntia fulgida)



Figure 3 Ferocactus emoryi near base of Table Top Mesa, with Cylindropuntia acanthocarpa and Carnegiea gigantea in background

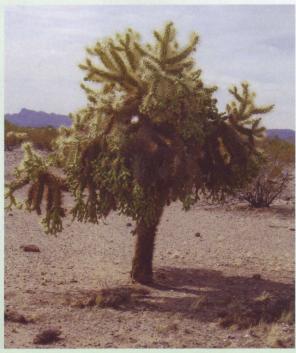


Figure 4 I.5m tall chain fruit cholla (Cylindropuntia fulgida) near base of Table Top Mesa



Figure 5 1.5m diameter clump of dog cholla (Grusonia emoryi) near base of Table Top Mesa



Figure 6 Close-up of Grusonia emoryi. Note the dry fruits

is on dirt/gravel roads that are well sign-posted, but regrettably are impassable during and just after rains. (There are many large arroyos cutting across the road). However, when dry, these roads can be traversed by a two-wheel drive vehicle, even with low clearance. In dry weather there are some extensive sandy areas that should, however, be approached with caution. Most of the dirt road, Vekol Road, runs parallel to and immediately west of Vekol Wash. Vekol



Figure 7 Mammillaria grahamii on Vekol Road, 3km south of Interstate 8, growing in the (dead) centre of a fairy ring of Grusonia emoryi. The entire M. grahamii plant is approximately 2.5cm tall

Wash begins in the Vekol Mountains and roughly parallels the Maricopa-Pinal County border, never running more than 7km from this border. The topography along Vekol Road near Table Top Mesa is fairly flat, with sparse but nice saguaros (Carnegiea gigantea), many specimens of Ferocactus emoryi (F. covillei; Fig. 3), many medium-sized (but, surprisingly, almost no large-sized) chain fruit chollas, Cylindropuntia fulgida (Fig. 4), and some areas with extensive carpets

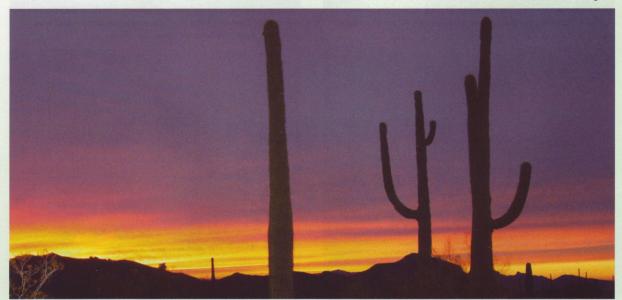


Figure 8 Sunset with desiccated saguaros (Carnegiea gigantea). This photo is from Organ Pipe National Monument, but looks virtually like much of the scenery along Vekol Road looking to the west towards the Sand Tank Mountains



Figure 9 A healthy stand of medium-aged saguaros (Carnegiea gigantea) at the base of Table Top Mesa



Figure 10 Echinocereus engelmannii amongst Grusonia emoryi near the base of Table Top Mesa



Figure 12 Christmas cholla (Cylindropuntia leptocaulis) in fruit in mid October near the base of Table Top Mesa



Figure 11 Christmas cholla (Cylindropuntia leptocaulis) and saguaros, near the base of Table Top Mesa



Figure 13 2m tall buckhorn cholla (Cylindropuntia acanthocarpa) amongst palo verde, near the base of Table Top Mesa



Figure 14 Our tent amongst half-dead, half-alive specimens of chain fruit cholla (Cylindropuntia fulgida) and ocotillo (Fouquieria splendens) at the camp-site near the base of Table Top Mesa

of the dog cholla, *Grusonia emoryi* (Figs. 5 & 6), which Benson called *Opuntia stanleyi* var. *peeblesiana*. Alongside Vekol Road there are also a few specimens of *Ferocactus wislizeni* and *F. cylindraceus* (see Gorelick 2005 for photos – *Bradleya*: in press), as well as *Mammillaria grahamii* (Fig. 7). This stretch of Vekol Road and Vekol Wash is surrounded by the Sand Tank Mountains to the west and Table Top Mesa to the east. Figure 8 looks almost exactly like this stretch of Vekol Road looking west towards the Sand Tank Mountains, even though this photo was taken approximately 80km to the south-south-west in Organ Pipe Cactus National Monument.

After following Vekol Road south for 17 miles from Interstate 8, turn east at the corral and cattle tank on to an un-named road that immediately crosses Vekol Wash in a thick sandy mesquite grove. Then proceed 4km to the south-western base of Table Top Mesa. Once you cross Vekol Wash, the cacti are much more impressive.

On the alluvial fans surrounding the south-west corner of Table Top Mesa are gorgeous dense stands of saguaros (Fig. 9), more *Ferocactus emoryi*, *Echinocereus* 

engelmannii (Figure 10), Mammillaria grahamii, (Fig. 7), several chollas – mainly Cylindropuntia fulgida (Figs. 1, 2, 4, 14), C. leptocaulis (Figs. 11 & 12), and C. acanthocarpa (Figs. 2, 3, 13, 16) – some prickly pears that resemble Opuntia engelmannii and O. phaecantha (Figs. 9 & 16), and one large area extensively covered by the dog cholla, Grusonia emoryi (Figs. 5 & 6).

Grusonia species are often considered weeds in flat areas of southern Arizona. They can form massive clonal clumps – sometimes several metres in diameter – and even fairy rings when older. I have seen huge quantities of Grusonia emoryi in Graham County, northeast of Mount Graham and south of the Gila River. Often one will see many neighbouring clumps of G. emoryi in a several hectare region. These clumps are disconnected from one another, but usually separated by no more than five or ten metres. I suspect that each of these regions is occupied by a single clone of G. emoryi, but have never seen genetic evidence to corroborate this (as exists for aspens in Colorado, creosote bush in the Mohave Desert, and several fungi in Michigan and the Pacific north-west). Table Top



Figure 15 A statuesque saguaro (Carnegiea gigantea) near base of Table Top Mesa. Note the veritable lack of spines on these older stems far above the ground (Photo: Sue Bertram)

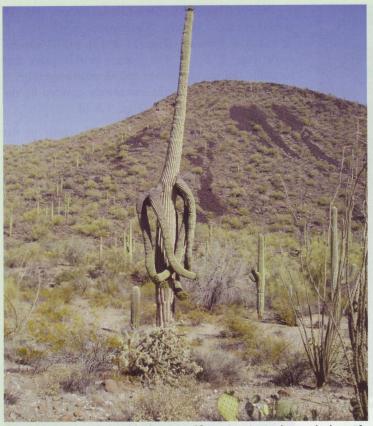


Figure 16 Another distinguished saguaro (Carnegiea gigantea) near the base of Table Top Mesa. Note flower buds – 28 May 2004

Wilderness is as far west as I have seen G. emoryi. The largerstemmed and more spine-covered species Grusonia kunzei seems to replace G. emoryi further west, especially in La Paz and Yuma Counties. Personally, I find Grusonia emoryi to be quite charming. It never grows to more than 20cm tall, and usually to only about one-third that height. It is very slow growing in cultivation. However, even very small clumps of approximately 15cm diameter produce several flowers each summer. Figure 6 shows the dry fruits at Table Top Mesa.

After approximately an hour of driving along dirt roads, there is a nice three-site campground at the end of the road, just south-west of Table Top Mesa (Fig. 14).

There is no water here, but there is a toilet, picnic tables, and fire pits. I have never seen more than one other group here, and they have always been quiet. This makes for fine car camping.

From the camp site there is a 6km hiking trail, which appears to be a former jeep track, to the top of Table Top Mesa. Table Top Mesa and the surrounding hills are of volcanic origin. Pumice boulders form the slopes and bajada. I have always been there with our young daughter, so have never hiked to the top, but have heard that it is not particularly strenuous. The early portions of the hike are relatively flat, crossed by a few small arroyas. Some of the saguaros are particularly stunning in this area (Figs. 15 & 16). There are also some picturesque ocotillos, *Fouquieria splendens* (Fig. 17).

So long as there is no rain, I highly recommend visiting Table Top Mesa if you are in the Phoenix area.



Figure 17 Ocotillos (Fouquieria splendens) at sunset at campsite, with Jatropha sp. in foreground