

Madera Canyon Species Spotlight:

Ocotillo

The wildfire that burned through Proctor in June, 2007, killed or damaged many plants. Perhaps the biggest casualty was the splendid giant Ocotillo at the Proctor Trailhead killed along with a number of surrounding smaller specimens by the intense flames. I am still saddened to walk by the charred giant, though it has since fallen into the grass and the arms are slowly decomposing, fading away. Luckily, the fire burned in an uneven mosaic and many other unburned, healthy Ocotillos remain around the mouth of Madera Canyon. Watching their tall thin branches quickly leaf out after seasonal rain or flowering scarlet at the tips in spring pauses me to reflect on just how unique and interesting these plants are here in our Sky Islands.

Ocotillo, *Fouquieria splendens*, is the northern-most growing member of a small, unique plant family of 11 species that otherwise grows in Mexico. Its closest relatives are found in Sonora and include the famous Boojum trees of Baja California. Ocotillo remind us that much of the flora in our region has affinities with the sub-tropics to the south. Widespread across the desert half of Arizona, they are often common on rocky alluvial slopes and plains, such as the bajada below Madera Canyon. The elegant plants slowly grow tall and candelabra-like from a stocky trunk covered in rough, fissured bark. Though often mistaken for cactus, Ocotillo are true woody shrubs with sharp thorns on long whip-like, unbranched stems.

Ocotillo produce many small oval leaves along their stems. Their habit of growing, then dropping, leaves several times a year in response to our desert climate is one of the plant's most intriguing features. During warmer months, Ocotillo leaves appear rapidly from the semi-succulent stems within 24 hours after significant rainfall and become fully developed in 5 days. The stems then remain leafy for a brief period, usually 3-4 weeks. When conditions dry out, the leaves drop off and the stems remain leafless until it rains again. Up to 5-6 leafy periods can occur per year, though only 2 or 3 are more usual. Ocotillo also go dormant and remain leafless during the coldest part of the winter.

Throughout most of its range, Ocotillo bloom primarily in the spring. Conical bunches of scarlet tubular flowers producing copious nectar emerge at the stem tips. Drawn to the sweet nectar, hummingbirds and carpenter bees are the main pollinators, but solitary bees, flies, butterflies, orioles, finches, verdins and warblers also visit Ocotillo blossoms. Research has suggested that Ocotillo flowering-time has evolved in response to hummingbirds, which transverse a wide portion of the plant's range during their northward spring migration. Reliable Ocotillo nectar provides an essential fuel source for the traveling hummingbirds.

Produced by pollinated spring flowers, tiny dust-like Ocotillo seeds are spread by wind and germinate after the onset of summer rain. Seedling mortality is high; only about one per thousand survives to the following summer. Very slow growing plants, Ocotillos reach maturity in 60-100 years and may live as long as 150-200 years! In retrospect, this

makes the loss of the Proctor giant at the hands of human carelessness all the more tragic. Fortunately there are many more Ocotillo in the area to bloom with gorgeous spring flowers. The nectar and pollen they provide will continue to help attract and support the birds and insects that we visit the canyon to enjoy.

