

Madera Canyon Species Spotlight:

Smooth Bouvardia

On a May walk along the upper Proctor Loop, I noticed a flash of motion over a spot of bright color in the thick woods ahead. My binocs revealed the flash as a regal male Broad-billed Hummingbird. The spot of color was a neon orange-red cluster of Smooth Bouvardia flowers enticing the hummer in for a drink. My first thought was, “Gorgeous Broad-billed!” Next thought, “Hey, cool! A hummingbird utilizing native flowers and not a canyon feeder at the lodge!” As the bird zipped off up-canyon, I couldn’t help but wonder at Madera Canyon’s diversity of flowering plants, like Smooth Bouvardia, that are not only beautiful, but attract amazing pollinators like Broad-billed Hummingbirds!

Smooth Bouvardia, *Bouvardia ternifolia*, is an elegant plant and one of the canyon’s more common shrubs. Plants only grow about 3 feet tall, rarely as wide and are deciduous. Found from 3,000 to 9,000’ on wooded slopes and canyon bottoms, Bouvardia prefers partial shade. It is particularly abundant along Madera Creek from Proctor to Mt. Wrightson Picnic Area. In her book, *Madera Canyon Wildflowers*, author Joan Lewis lists Smooth Bouvardia on all canyon trails.

In spring bright green, lance-shaped leaves sprout in whorls of 3 to 4. Up to 3 inches long, the leaves are often covered in soft minute hair. The shrubs blend in perfectly with greens of other canyon foliage. With the onset of summer, the Bouvardia show begins! From May to October Smooth Bouvardia erupts into bloom, producing upright clusters of bright orange-red tubular flowers from stem tips. The narrow blossoms are up to 1¼” long, flaring into four tiny pink-lined petals at the tips. Hummingbirds, and butterflies like Cloudless Sulphur and Southern Dog-face, appear to be the primary pollinators of the conspicuous flower clusters. Smooth Bouvardia provides an abundant/reliable summer nectar source in the canyon after spring “hummingbird” wildflowers, like Desert Honeysuckle and Parry’s Penstemon, finish blooming.

Smooth Bouvardia is also the sole larval food-plant of the Falcon Sphinx Moth, *Xylophanes falco*. Like many canyon moths, the monsoon-flying adult is handsome, but modest. In mixed shades of gray lined with black and white, the camo-patterned adults “disappear” into crevices of tree bark during the day. The caterpillar on the other hand, is one of the most spectacular insects in Madera Canyon! The 2 to 3 inch larvae come in two color forms- bright leaf-green or dark gray-green running to black, and sport a flexible horn at the tail. Both forms are stippled in rows of tiny white dots with six large white spots running down each flank. The caterpillar’s head is attached to a retractable hood with striking false-eyes of black, yellow and turquoise. Mature caterpillars descend from the foliage and dig into soft soil to pupate, remaining underground until the following year’s monsoon rains.

Smooth Bouvardia is easy to spot by looking for the unmistakable “fire cracker” flower clusters. Look for Falcon Sphinx caterpillars in August and September on partially defoliated plants; the larvae are often conspicuous, but can hide amazingly well among

remaining foliage. Use a bit of caution when looking for Smooth Bouvardia, particularly along streambeds- a preference for partial shade may result in the shrub growing amidst patches of Poison Ivy!



Smooth Bouvardia



Falcon Sphinx caterpillar- defensive position with head retracted into hood