

Madera Canyon Species Spotlight:

Southwestern Coral Bean

Along the road near White House Picnic Area, coral bean bushes grow up between boulders and within soil-filled fissures in the granite bedrock. Merely a group of “dead-looking”, leafless thorny stalks through much of the year, in summer and fall these multi-stemmed shrubs become conspicuous with their large bright-green leaves shaped like those of cottonwood or aspen. Among the leaves hang long dark brown bean pods, which split open in the sun when dry to disgorge rock-hard scarlet beans upon the ground.

Southwestern Coral Bean, *Erythrina flabelliformis*, is a member of a worldwide group of sub-tropical to tropical trees and shrubs in the Pea family. Its species range extends north from Mexico just into the United States to the Sky Islands of southeastern Arizona and southwestern New Mexico. An ancient group of plants, other species of coral bean are found in Africa, Asia, Australia, and even Hawaii. Southwestern Coral Bean is one of the special group of Madrean plants and animals that links our local Sky Islands with the Sierra Madre and Mexico to the south.

In Madera Canyon, Southwestern Coral Bean grows in a narrow band between the heat/aridity of the upper Sonoran Desert below and the cold/frost of the oak-juniper woodlands above. Further south in Mexico where frosts do not occur, the species grows into small trees up to 15 ft. tall. Here in Madera Canyon and the Sky Islands coral bean stems regularly freeze back to the height of the surrounding rocks in winter- usually no more than two or three feet high! The rocks heat up in the warm Arizona sun during the day, then radiate this stored heat back into the atmosphere at night, protecting the nestled tuberous root and most stems from freezing. It is a delicate balance that allows Southwest Coral Bean to survive in marginal habitat at the northern limits of its range.

In late May and June, coral beans send up stems producing spectacular “fireworks-like” flower clusters before any leaves appear. Completely unlike the typical blooms of most peas and beans, each flower on a cluster has evolved into a long, narrow tube of brilliant orange-red. Hummingbirds are attracted to these showy bright flowers and pollinate them as they fly from plant to plant probing for nectar. Conspicuous bean pods result from pollinated flowers and persist on the stalks long after their beans drop. The shiny red beans are very attractive, but poisonous to eat. Large heart-shaped leaves appear in profusion after flowering, eventually turning bright yellow with the change of the seasons and providing a splash of early fall color on canyon hillsides.

In Madera Canyon coral bean can also be found among the streamside boulders from below the waterfall at Proctor Rd. up to Madera Picnic Area and on sunny, exposed rock faces along Nature Trail between Wrightson Parking Area and Amphitheater. With practice it becomes easy to spot even the leaf-less stems sprouting from boulders. Southwestern Coral Bean flowers and bean pod are featured prominently with a Blue-throated Hummingbird in front of Mt. Wrightson on the Friends of Madera Canyon logo.

