Madera Canyon Species Spotlight:

Green Lynx Spider

Around the Proctor Trailhead the verdant greens of summer have mostly faded into the tan, ochre and gold of fall. Here and there, seemingly random tangles of cobwebs bind together the tops of dried grass stalks or nearly leafless mimosa branches. Shimmering in the sunlight, these small spider webs appear nothing more than a random, silken mess, but a closer look reveals "treasure". These are the nursery webs of female Green Lynx Spiders. At the heart of each snarl is a pearly silk sac filled with eggs guarded ferociously by a vigilant mama spider willing to take on all comers!

The Green Lynx Spider, *Peucetia viridans*, is our largest member of a family of day-light active hunting spiders related to wolf and fishing spiders. They are a beautiful translucent green color, as if carved from imperial jade, with cream and rose markings along the abdomen. Their long, thin legs are covered with prominent black spines and a matte of white hairs surrounds the peculiar hexagonal arrangement of their eight eyes. Females grow larger than males and have more prominent abdomen.

Possessing relatively keen eyesight, these agile spiders are nomadic hunters, scurrying quickly over low vegetation and jumping with precision. Lynx spiders actively hunt and ambush prey. They spin and put down only a silk "dragline" for safety against falling wherever they go rather than building webs. Lynx spiders are often seen poised motionless for ambush in a ready, prey-catching posture around flowers awaiting flying pollinators. Often locally abundant and effectively camouflaged amongst background foliage, the Green Lynx Spider is a major predator of insects, readily catching beetles, butterflies, moths, flies, honey bees, wasps- even bumble bees twice their size!

Here in Madera Canyon, Green Lynx Spiders produce one generation per year. Going through eight exoskeleton molts, these spiders require some 280 to 300 days to reach maturity in June and July. The newly mature adults mate in July and August. A male approaches a female spider and performs a courtship display of ritualized movements- a mating dance. His movements must be precise; if not, he runs the risk of being attacked and eaten! If the female accepts the male's display, she allows him to approach. Mating takes place in the air, the clasped pair hanging together from a silken line.

In 21 to 28 days after mating, females construct a silk egg sac suspended within a maze of silk threads- the nursery web- and lay an average of 200 eggs inside. Females remain on the nursery web and defend their eggs and young with great vigor! The eggs hatch in 11 to 16 days, but the helpless spiderlings remain inside the sac until after their first molt, about 1½ weeks. After this molt, the female helps the young emerge by tearing open the egg sac. Her babies then congregate in the nursery web for some time after emerging, taking full advantage of motherly protection. Like many of our canyon arthropods, adult lynx spiders do not seem to live through the first hard winter freeze, but the spiderlings amazingly over-winter. Those that survive the elements and predation go on to perpetuate the species for another generation in the Madera Canyon cycle of life.



Female Green Lynx Spider in a Datura blossom



Female Green Lynx Spider in nursery web with egg sac