

Hissers in the Dark

Catch Insects at Night



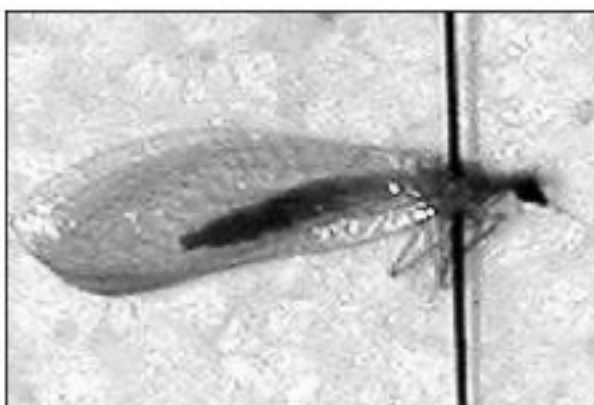
Ceanothus silkmoth



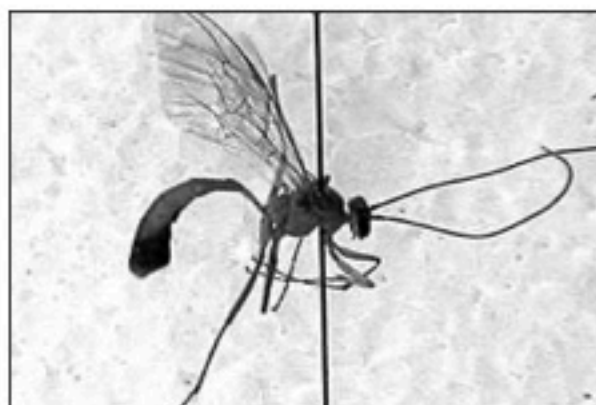
Geometrid emerald



Geometridae



Green lacewing



Ichneumonid wasp



Ten-lined beetle

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An ordinary white bedsheet is the trap. A black light is the bait. The sheet is stretched out on a frame, and the black light illuminates it from behind. And the prey? Night-active insects.

"A large portion of insects see things within the ultraviolet spectrum," says entomologist Michael Klein, who will set up that temporary snare one evening this weekend at the Blue Sky Ecological Preserve. This

attraction to ultraviolet is especially true of those insects that as adults like to eat pollen and nectar. For complicated evolutionary reasons, they are our night pollinators. Fragrant white flowers are what they prefer more than anything else. And that's why the black light works. "The insect thinks it's a source of food, and it goes to the sheet."

Once the insects are at hand, those who participate in Klein's "Insects at Night" program can capture them. Any lidded container will do. But Klein will also bring along fifty little plastic cubes, about one inch square, each with a magnifier built into its top lid. "Kids [and adults, too] can use these to see the insects blown up. And I'll be at a table, and they'll bring them over to me, and we'll discuss

them."

Moths will be among the insects that are temporarily incarcerated, studied, then released. About half the species active in San Diego County are nocturnal varieties. "One of the families we'll run into is the geometrids [pronounced geo-MEH-trids]," says Klein. "When we were growing up, we used to call their caterpillars 'inchworms.' And one of the diagnostic features of a geometrid is that it has intricately shaped wings."

It's not true that moths are less beautiful than butterflies, says Klein. "Light pastel green geometrid moths are called 'emeralds.' They're very pretty. Another family we'll run into is among the more charismatic ones; it's the saturniid [sat-URN-id] moth family. These are the traditional silkmoths. They're the flashy ones — very colorful. And they're very big. Most saturniids vary in size from three inches to as much as seven inches, wingtip to wingtip." There may be some of those at Blue Sky. "We have one species that is still out flying, although it's more of a springtime flier. It's called the ceanothus [see-an-OH-thus], like the flower. Its wingspan is about four and half inches, and its main color is the color of dried blood — or wine, burgundy wine."

Get ready for nighttime beetles, too, including one that can cause needless terror, says Klein. "The main

group that we're running into right now is in the family Scarab. They're very diverse. Within that Scarab group we have a subgroup which we call the June beetles. One that people get kind of giddy over — and sometimes little kids scream about — is the ten-lined June beetle. Head to abdomen, it can be one and a half inches long, which is a fairly big guy. The larvae are mostly root feeders, but as adults they like to eat pollen, and so they are attracted to nighttime flowering plants. And if you hold one of these beetles and prevent it from flying, it has a tendency to hiss at you. It's completely harmless, but it does do that hissing, which is a predator defense mechanism."

Lacewings, another group of night-active insects, are "underappreciated," says Klein. "They belong to the order Neuroptera [new-OP-tera]. The more common name is the nerve-wing insects. That's because their wings are very dense with wing veins that look like a ganglia of nerves." The species we often see in our region is the green lacewing. "It's a beautiful little insect, maybe an inch and a half, wingtip to wingtip. As adults, they're a light lime color, not shiny, very flat. But where they are important is in the larval stage, and that's where they're not given their respect.

"As larvae, their primary source of food is aphids. People think of ladybird beetles — or ladybugs — as being the

primary predator of aphids. But the green lacewings eat significantly more per day than ladybird beetles, and it's not a well-published fact." Are they not given the press because they're not as "charismatic" as ladybugs? "Could be. They're also not as easy to farm as ladybugs — that's why they're less known. But farmers and gardeners are familiar with the benefits that lacewings do provide for them."

Finally, participants will see Ichneumonid (ick-new-MOHN-id) wasps. "That family of wasps is mostly nocturnal. And they're parasites. They parasitize other insects."

Ick.

"Well," says Klein, "nature does what it's supposed to do to survive. Their job is the same as any creature's." Plant or animal, it does what it does to perpetuate its species. "And parasitic insects are very important to us, because they help to keep in balance a lot of the other insects out there."

— Jeanne Schinto

"Insects at Night"
Saturday, July 12
8:30 p.m.
Blue Sky Ecological Reserve
Espola Road
Poway
Cost: \$1
Info, directions, parking
instructions, and reservations
(required): 858-679-5469

LOCAL EVENTS