### FIELD OBSERVATION REPORT

By Mary Wilson September 2021

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**Wildflower Report**—This month is about the same as last month. Tumbleweed are still green, California buckwheat are going to seed and the Jimson weed and sunflowers are in bloom.

Well Lancaster made the news: "September 7, 2021 - Lancaster, California had 59 days of over 100-degrees, ever, in a single year!" No wonder when you look at the photos of the fires of 2020 there doesn't seem like much of a change. With the excessive heat and only 2.11-inch of rain since October 2020 there wasn't much chance of fire recovery and any plants growing, including grasses and fire follower plants. One has to wonder if the seed banks are able to survive from fires, excessive heat, and very little rain for future growth. Will keep doing research to see what will happen in the coming year.

#### **BOBCAT FIRE ONE YEAR LATER**

The Bobcat Fire started on September 6, 2020 and burned 115,796 acres in the central San Gabriel Mountains. It started in parts of Arcadia and grew to the Mount Wilson Observatory and on September 17, 2020 the fire crossed Highway 2 near the junction of Highway 39, which is south of Juniper Hills. Areas in danger of the fire were Juniper Hills, Devil's Punch Bowl, Paradise Springs, Valyermo Road, Big Pines Highway and Big Rock Creek.

The following photos were taken on September 6, 2021.



■The Benedictine Monks were evacuated from the 2,000 acre St. Andrew's Abby, however, the fire went around the Abby and was saved from any destruction.

The beautiful trees by the creek bed on Valyermo Road from the Abby to Big Pines Highway were burned.



Where Valyermo Road meets with Big Pines Highway and Big Rock Creed Road there are still signs of no entry.



■Big Bines Highway to Jackson Lake.

Big Rock Creek Road to Big Rock Creek Recreation Area. ▶



# **BOBCAT FIRE CONTINUED (photos by Mary Wilson)**



Devil's Punch Bowl still cannot be reached and as you can see by the photos just about all the vegetation has not come back.

**◆** October 22, 2020

September 6, 2021 ▶



### LAKE FIRE ONE YEAR LATER

The Lake Fire started August 12, 2020 in the Lake Hughes area and spread to Pine Canyon Road, then to Highway 138, and the Ridge Route Road. It burned 31,089 acres and was contained on September 28, 2020.

Ripley Desert Woodland—55.2 acres burned



■September 2, 2020

September 6, 2021 ▶



George R. Bones Wildlife Sanctuary



**■**November 6, 2020

September 5, 2021 ▶



Portal Ridge Wildlife Area



**■**November 6, 2020

September 5, 2021 ▶





**VELVET ANTS**Mutillidae Family

■Dasymutilla gloriosa
Spotted at the Poppy Reserve

Dasymutilla magnifica ► Spotted at the Devil's Punch Bowl



These insects are not ants but are actually wasps. They get their names from the hairs that cover their body and because they resemble ants. California has about 100 species of Mutillidae that live in the desert. The Multillidae are a family of more than 3,000 species of wasps whose wingless females resemble large, hairy ants. Their common name "velvet ant" refers to their dense pile of hair, which can be scarlet or orange, but may also be black, white, silver, or gold in color. Their bright colors serve as aposematic signals—to warn off predators.

Velvet ants are found worldwide. Some, like the red velvet ant, are mainly found throughout the U.S., but especially in dry regions. They gravitate towards open areas like fields, meadows, and even lawns. However, because velvet ants are **parasitic**, they will appear wherever their host species, such as bumblebees and wasps, live. Adult velvet ants consume nectar and water from flowers. They may also consume larvae and adult insects, such as flies, bees, wasps, and beetles.

Velvet ants range in size from 1/8-inch to one inch and they feed on nectar. Their exoskeleton is unusually tough (to the point that some entomologists have reported difficulty piercing them with steel pins when attempting to mount them for displays). The males have wings but no stingers. The females have stingers but lack wings. The female is known for her extremely painful stings that can last up to 30 minutes, however, they are not aggressive and sting only in defense. The toxicity of the sting venom is much lower than that of honey bees or harvester ants. Unlike true ants, they are solitary and lack complex social systems. Both the male and female can make a squeaking sound by rubbing one abdominal segment against another.

Females are most often found scurrying along the ground looking for nests of host species, while males are found on flowers. The males will fly low to the ground seeking the females. After mating the females will look for ground nesting wasp or bee with pupal chambers (when these insects are in the pupa stage they are forming their body parts). Once the female finds these nests she will lay her eggs on or near these chambers or on what will be the hosts. A grub-like velvet ant will emerge from the egg and feed on the body of the host (the wasp or bee pupa) as well as its larvae and will grow to full size in a matter of days. The shell of the host (wasp or bee) then becomes the site to construct a cocoon for the velvet ant pupa and the adult will emerge in the summer.

The white velvet ant spends time on the crossote bush where it hides between the fuzzy seeds. The red velvet ants are also known as cow killer and mule killer ants and are considered to be so deadly that they can kill livestock. They can sting multiple times and it is believed that their sting can cause the death of cows and mules. But this is just a myth and not true.



## THE "COW KILLER" Red Velvet Ants By Mary Wilson

There is a legend that the female red velvet ant (*Dasymutilla occidentalis* (Linnaeus) is a "cow killer" because of her sting and that it is painful enough to kill a cow. One way this nickname came about was that a cow was eating and the ant was in the food. The

ant stung the cows tongue and caused the tongue to swell and suffocated the cow.

In defense of this female insect, first she is not an ant she is a wasp. She doesn't run in large groups of other velvet ants and is quite solitary. She has red coarse hairs on her body called setae and this is a warning coloration that she is not to be messed with or eaten. She is about 1-inch long, is a fast runner, has a strong exoskeleton, can release a smelly odor, and can emit a warning sound. She is not aggressive but will defend herself. She doesn't have wings like the male, but the male doesn't have a stinger. She is a fast runner and she has a stinger that she can use more than once. This is where she could be in trouble because the sting is quite painful—on a scale of pain from 1 to 4 (with 4 being most painful) her sting is around a 3. People that have been stung say that the feeling is like that of electric shocks occurring in quick succession and the pain could last for 30 minutes. Doing research I could not find any scientific information of a cow that had ever died of a sting. The sting was painful, but the venom was not very toxic.

There is a theory that a cow may have died from this insect as the "cow killer" wasp was found on it's body. Cows have cloven hooves, meaning that there's a notch in the front of the hoof, splitting it into two distinct segments. The tissue between the split hoof is soft enough that if a cow accidently stepped on the velvet ant and received a sting in that spot, the cow could possibly react to the pain by running across the pasture at a high speed. If the cow should happen to crash into a fence or step into a gopher hole and break a leg, the rancher may have to euthanize the cow. Supposedly this happened and the velvet ant was found still lodged in the hoof. Did the cow die from the "cow killer" sting and it's venom or did it die because it didn't know how to react to pain and broke it's leg?

The best thing to do is to stay away from this insect and all insects—they want to be alone!

#### **Animal Pain Awareness Month**







Pooch didn't win with a porcupine

September is Animal Pain Awareness Month. Humans first began domesticating dogs to be companions around 14,000 BC. The first veterinarian school was established in France in 1761. The International Veterinary Academy of Pain Management was established in 2001. The first Animal Pain Awareness Month took place thanks to the International Academy of Pain Management on 2015.

Pets and other animals can feel pain the same way we do. Unfortunately these animals cannot verbally communicate with us and they will hide their pain just as they were once hunting predators and could not afford to show their pain because an injured animal could mean an easy target for other wild animals. So we humans need to educate ourselves about how to recognize and manage acute and chronic pain in our animals. Pain isn't fun for any of us, and animals are no exception. Animal Pain Awareness Month is to remind us to learn more about the health and well-being of our animals and pain management, be it acute or chronic, to improve their quality of life. Maybe it is time for your animals to have a veterinarian check-up.