

Tarantula Hawk, a Serious Threat To Humans? Article and photos by Trail Guide David Cooksy

One would think, and logically conclude, that a flying predator which hunts tarantulas is a serious danger to humans. However, tarantula hawks may appear intimidating but are generally mild-mannered towards humans. Nonetheless, one should never attempt to pick up or molest a tarantula hawk as the sting is extraordinarily painful! The safest way to enjoy this beast of flying beauty: look but do not touch. The tarantula hawk while neither a tarantula nor a hawk is a spider wasp which hunts tarantulas as food for its larvae. Tarantula hawks belong to any of the many species in the genera Pepsis and Hemipepsis, in the family Pompilidae (spider wasps).

The more familiar species are up to two inches long, with blue-black bodies and bright, rust-colored wings, making them among the largest of wasps. The coloring on their wings warns potential predators that they are dangerous. Their long legs have hooked claws for grappling with their victims. The stinger of a female tarantula hawk can be up to 7 mm (1/3 in) long, and the sting is considered the second most painful insect sting in the world.

Tarantula Hawk, continued on p. 6





A Message From Executive Director Jay Wilson

Mission Trails Regional Park (MTRP) and the MTRP Foundation continually benefit from talented individuals volunteering to lend a hand in a variety of ways. Not all of the Park's volunteers are directly involved in maintenance/ restoration, educating our visitors about the flora and fauna, or staffing the front desk and gift shop in the Visitor Center.

Cameron Scott is a professional videographer. In January of 2013, I met Cameron while he was videoing an art reception in the Visitor Center Gallery hosted by several artists, including his mother, who was exhibiting her unique fabric art. I asked Cameron if he would be interested in video recording each of our monthly art exhibits; in turn he would receive credit for the production. He agreed, and each month as a new art exhibition is hung, Cameron produces a new two to three minute preview video to help promote the art exhibition. He uploads the videos to vimeo and we send a link to over 4,000 individuals through our email list, post it on our website, and send the link to a number of print and digital sources. He is a freelance video producer, cameraman, editor, and photographer. His work is inspired by, and often focuses on, the diverse environments and events

found within San Diego County. He has exhibited collaborative works at the Visions Art Museum in San Diego, the Mission Trails Regional Park Gallery, and the Front Porch Gallery in Carlsbad. Cameron may be reached by email at CameronB.Scott@gmail.com. To view some of his videos, including some spectacular sunsets, go to vimeo. com/cameronscottvisuals.

Dr. Mitsuo Tomita and Charles Carter are two volunteers who continually make a difference. Nearly 4 years ago, Dr. Tomita approached me about having concerts in the Visitor Center Theater. He offered to find and schedule the groups, and assured me the groups would donate their performances. Three seasons later we are going strong with a free concert on the third Sunday of each month at 3:00 pm in the Visitor Center Theater. With the start of the second season, Charles asked if I could use some help with the concerts. He now helps every group set up, produces the programs, welcomes everyone attending the concerts, and has arranged for some of the musical talent. He also collaborated with George Varga, one of our key Trail Guideswho is also our amateur astronomer in residence, to produce three "Above the Ozone" programs. these programs feature spectacular photos from the Hubble Telescope with background ambient "space music" shown to our Volunteers and their guests.

MTRP is always looking for volunteers. Check out our web page at mtrp.org, click on "The Park" and scroll down to "Volunteers" to view the volunteer opportunities including an on-line volunteer application. Applications are also available at the Visitor Center.

> Scan our QR code



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Save the Date

Explore Mission Trails Day Saturday, May 17, 2014

Welcome the Park's Newest Ranger

After a career in the publishing industry, Chris Axtmann decided to trade in her desk for hiking boots. Lifetime nature lover, she began volunteering at Mission Trails Regional Park in 2008. Having attended and successfully completed the Park's Trail Guide Training Class, she has donated much of her time educating the public during Trail Guide led nature walks.



Chris has also aided our patrons as Trail Patrol, staffed the Visitor Center front desk and gift shop, and assisted the Foundation at outreach events. A recent graduate of California State Parks Academy, Chris is ecstatic at being hired by the City as a Park Ranger and having the opportunity to apply her training and her knowledge of our city's largest open space park to its care and preservation. She is also looking forward to maintaining and enhancing recreational opportunities, and assisting in and developing unique educational programs.



Climber's Loop Trail

Mission Trails is a multi-use open space park. It affords access to numerous recreational activities such as hiking, biking and horseback riding. What may not be readily known by its visitors is the only authorized section of the park which may be utilized by rock climbers. This area can be accessed by using the Climber's Loop Trail.

This trail, which is accessible from two separate trailheads off Father Junipero Serra Trail (FJST), is the only trail in the park that goes up a mountain, but does not go to the top of the mountain. This mountain is Kwaay Paay and has spectacular rock faces and outcroppings that, for years, have been used by professionals, as well as amateurs, to hone their climbing skills. These athletes have even given sections of this area (unofficial) fanciful names, such as Middle Earth, Limbo, Underworld and Main Wall.

Not a rock climber? No problem. Any visitor to the park may explore the Climbers Loop Trail, however, if you want to do some rock climbing and are new to the sport, it is suggested you first join one of the many rock climbing classes offered by local sporting businesses. Both trailheads begin on the east side of Father Junipero Serra Trail and ascend, with numerous switchbacks, to the base of the rock face. From here the hiker traverses along the bottom of the outcroppings until reaching the trail back down the mountain. Please, stay on the trail and remember, there is no access to the mountains summit from this trail. The trailhead for the Kwaay Paay summit is located off of FJST across from the Old Mission Dam.

As you hike, be sure to stop along the way to view one of the more beautiful views in the park. You may not be at the top of Kwaay Paay, but you are at an elevation where you can see the ocean in the distance. It also affords a view of the Visitor Center, as well as South Fortuna, but don't forget to look down at the incredible sight of the San Diego River's riparian woodland below. The most dramatic view of all is when you look up at the impressively huge boulders that loom over you, many of which are as big as houses. Look down again and, if you haven't already done so on your way up the trail, note the boulders strewn along the side of the mountain and in the river below. Most of them were once majestically perched near the top of the mountain just waiting for natural forces to propel them downward.

Thank you to our many Mission Trails contributors of 2013

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Tarantula Hawk, continued from p. 1

Behavior

The female tarantula hawk captures, stings, and paralyzes the spider, then either drags her prey back into her own burrow or transports it to a specially prepared nest where a single egg is laid on the spider's abdomen. When the wasp larva hatches, it creates a small hole in the spider's abdomen, then enters and feeds voraciously avoiding vital organs for as long as possible to keep the spider alive. After several weeks, the larva pupates. Finally, the wasp becomes an adult and emerges from the spider's abdomen to continue the life cycle.

Tarantula wasps are also nectarviorous. The consumption of fermented fruit sometimes intoxicates them to the point that flight becomes difficult. While the wasps tend to be most active in daytime summer months, they tend to avoid high temperatures. The male tarantula hawk does not hunt; instead, it feeds off the flowers of milkweeds, western soapberry trees, or mesquite trees. The male tarantula hawk has a behavior called hill-topping, where he sits atop tall plants and watches for passing females ready to reproduce.

Distribution

Worldwide distribution of tarantula hawks includes areas from India to Southeast Asia, Africa, Australia, and the Americas. Tarantula hawk species have been observed from as far north as the state of Washington in the United States, and as far south as Argentina in South America. Nine species of tarantula hawks are found in the deserts of the southwestern United States, with Pepsis formosis and Pepsis thisbe being common. The two species are difficult to distinguish, but the majority of P. formosa have metallic blue bodies and reddish antennae, which separates them from P. thisbe (both species have bright orange wings that become transparent near the tip).

Sting

The tarantula hawk is relatively docile and rarely stings without provocation. However, the sting, particularly of P. formosa, is among the most painful of any insect, though the intense pain only lasts about three minutes. Because of their extremely large stingers, very few animals are able to eat them; one of the few animals that can is the roadrunner. Many predatory animals avoid these wasps and many different insects mimic them, including various other wasps and bees, as well as moths, flies, and beetles.

The state of New Mexico chose the insect in 1989 to become its official state insect. Its selection was prompted by a group of Edgewood, New Mexico, elementary school children doing research on states which had adopted state insects. They selected three insects as candidates, and mailed ballots to all schools for a state-wide election. The winner was the tarantula hawk wasp (specifically, P. formosa).

Tarantula hawks of a variety of species can be found almost anywhere in San Diego County, from the coastal plain to the foothills to the mountains to the desert. Their only requirements are flowers for the adults to feed at and tarantulas for the young to feed on.

Photo Contest Date Change

The 2014 Amateur Photo Contest exhibition will be held from September 13 to October 10. The deadline for submissions will be towards the end of August.

More information to come.

Free Concert Series 2014 Schedule

The Mission Trails Regional Park Foundation Concert Series is free to the public and is scheduled one Sunday per month at 3:00 p.m. in the Visitor Center Theater, with a reception immediately following.

Feb 16

Yale Strom and Lou Fanucchi "Klezmer Music"

Mar 16

Candella String Quartet Scripps Ranch High School

Apr 06 San Diego Harp Society

May 18 Mary Lou Brandwein with the Takahashi Flute

June 08 San Diego Native American Flute Circle

Performances are subject to change.

Mission Trails Regional Park Donor Opportunities

By donating to Mission Trails Regional Park Foundation, you are preserving the past and investing in the future.

Mission Trails Regional Park Foundation provides opportunities for individuals, businesses, community organizations, and foundations to support a variety of programs and projects within the park. Community support is important to ensure adequate funding to maintain the award winning Mission Trails Regioanl Park Visitor and Interpretive Center and the multiple amenities the park has to offer.

Special event and project sponsorship are also available. Sponsorships for Explore Mission Trails Day, an annual event held each May, range from \$500 to \$5,000. Exhibit sponsorships begin at \$2,500. Bench and table sponsorships range from \$1,500 to \$4,000 depending upon the item and its location in the park. Contact Mission Trails Regional Park Foundation at 619-668-3280 or mtrp@mtrp.org for additional information.

Names of contributors of \$1,000 or more will be engraved on the donor board displayed at the Visitor and Interpretive Center. Yearly donations of \$100 or more are accumulated from year-to-year for donor recognition purposes.

Become a Business Friend of Mission Trails

Business Donors making contributions of \$100 to \$500 are eligible for a web site link from the Mission Trails web site for a period of six months. Business Donors making contributions of \$500 and above are eligible for a period of one year.

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Mission Trails Regional Park Foundation, Inc.

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Roland Roberge, Editor Gerald Tietje, Masthead Photo

A COPY OF THIS AND PAST NEWSLETTERS ARE AVAILABLE ONLINE: mtrp.org/newsletter.asp

Another Successful Arbor Day in Mission Trails

Arbor Day in Mission Trails was celebrated at the East fortuna Equestrian Staging area on Saturday, December 7, 2013. The public was invited to take part in the donation and/or planting of oak trees. Although the morning was very chilly and rain clouds were threatening nearly 30 volunteers showed up to help with the planting - or act as cheerleaders. Especially helpful were members of Boy Scout Troop 950 and Cub Scout Packs 951 and 959. Foundation President, Joe Morse, and Senior Ranger, Matt Sanford were on hand to introduce the donors and thank the participants. This year's donors were: John Caffrey, in memory of Nancy L. Caffrey; Tom Gitchoff; Lindsay and Dianne Hill, in memory of Rolande McManus; Leslie Johnson-Leech, in memory of Elaine and Erv Landau. Park Grounds Maintenance Workers, Carmelo Esquer and Tom Folk co-ordinated the event and instructed those attending on safety procedures and how to properly plant the trees.

Arbor Day in Mission Trails is sponsored by City of San Diego Councilmember Scott Sherman, City of San Diego Park & Recreation Department, Mission Trails Regional Park Citizens' Advisory Committee and Mission Trails Regional Park Foundation.



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