



Hermes Copper and 'Thorne's' Juniper Hairstreak

A Report on their Status
Following Firestorm
2003

by Michael Klein

The last time I wrote to you, I spoke about the devastation that hit San Diego County (*American Butterflies* – Winter 2003). At the time of my article I was still in shock and numb as to what had just happened. It is not very often in a person's life that we lose nearly fifteen percent of our county's habitat to brush fires. At that time I shared with you information about the impacts these fires had on two species of butterflies which have very restricted ranges. Hermes Coppers and 'Thorne's' Juniper Hairstreaks were severely affected by these fires, but, I am constantly amazed at how plants and animals find ways to survive. This is a follow up article on how they fared.

Hermes Copper.

Having spent the past eight to nine years studying this butterfly, I was familiar with its range in San Diego County. I knew that the butterfly would survive because there were sections of Hermes Copper habitat north of the Mexican border and south of Interstate 8

which did not burn. Unfortunately, much of this area is privately owned and public access is restricted unless permission is obtained from the landowners. There are, however, some habitat sections that are publicly owned and to which public access is allowed.

Because the fire burned many known localities where Hermes Coppers lived, it provided an impetus to search for undocumented colonies in unburned areas of appropriate habitat that had not yet been explored. Since the fires, I and others, have found at least seven

This page: A Hermes Copper, with its golden "messenger of the sun" underside. May 19, 2005. San Diego County, CA.

Opposite page top: A 'Thorne's' Juniper Hairstreak perched on an Tecate cypress.

Opposite page bottom: Anderson Ridge Road on Otay Mountain. Left: Before the fire. Right: After the fire.



new locations occupied by Hermes. This past June Jeff Glassberg had the opportunity to see some individuals on a visit to one of these spots. I have surveyed a few areas which were occupied by Hermes Coppers before the fires and, after two seasons, they are still unoccupied. Annual visits will continue as part of my research to learn more about how much time is needed for Hermes Coppers to recolonize an area they once occupied. Current estimates are that it takes up to eighteen years. I hope that this estimate is off and they come back sooner.



'Thorne's' Juniper Hairstreak.

In my Winter 2003 article about the fires, I speculated that 'Thorne's' Juniper Hairstreak might now be extinct. Happily, as mentioned by Fred Heath (*American Butterflies* – Summer 2004) they have not gone extinct. I would not consider them to be thriving either. The only known populations of this butterfly are on Otay Mountain.

Thorne's Hairstreak caterpillars feed exclusively on Tecate cypress. This cypress is found only at seven main locations in the world and three of these locations are within San Diego County. Oddly the butterfly has never been recorded at any of these locations except for those on Otay Mountain. The reasons for this are still unknown and investigating this mystery is part of my ongoing research.

There were more than 5,000 acres of Tecate cypress on Otay Mountain before the fire. After the fires went through, about 500 acres remained within six primary stands. Within these Tecate cypress stands Thorne's Hairstreaks appear to be fairly numerous. Most of the extant stands are located in areas of difficult terrain that are nearly life threatening to reach. In some ways this is good for the butterflies but in some ways it is not so good.

The cypress is a closed-cone conifer and considered by experts to be a fire dependent tree. In other words, fire needs to strategically burn through the woodland and cause the cones to open, allowing the seeds to fall to

