

# The Buckwheat Metalmarks

by Gordon Pratt, John F. Emmel and Gary Bernard



Jeffrey Glassberg (2)

## The caterpillars of many North American butterflies feed upon buckwheats (*Eriogonum*).

These butterflies include Ceraunus Blue, Reakirt's Blue, Acmon and Lupine Blues, Veined Blue, Gorgon Copper, Blue Coppers (which may include two species), several hairstreak species in the genus *Callophrys*, Gray Hairstreak, Square-spotted Blue complex, Dotted Blue

complex do not feed upon plants in the legume family.

The butterfly caterpillars that feed upon buckwheats can be classified into three groups: those that feed upon flowers and seeds exclusively, those that feed upon leaves exclusively, and those that can feed upon leaves or flowers and seeds.

The species that are specific to buckwheat flowers and seeds are in the genera *Euphilotes* and *Philotiella*, while the ones that feed almost

Opposite page: A Mormon Metalmark in the *duryi* group shows off its underside while feeding. Sept. 26, 1998. Panther Junction, Big Bend NP, TX



Left: The upperside of a Mormon Metalmark in the *duryi* group. Sept. 26, 1998. Panther Junction, Big Bend NP, TX

complex, Rita Blue complex, Spalding's Blue, Small Blue, and the subject of this article, the Mormon Metalmark complex. All of these butterflies belong either to the gossamerwing or metalmark families. Some of them, such as Ceraunus Blue, Reakirt's Blue, Acmon Blue, *Callophrys* hairstreaks, Gray Hairstreak, and some populations of Mormon Metalmarks, do not feed exclusively on buckwheats, but also use other plant families as well. Of these species, only members of the Mormon Metalmark

exclusively on leaves are the buckwheat-feeding coppers and the Mormon Metalmark complex. The remaining species seem able to feed upon leaves and flowers and seeds as well; most of these species will also feed upon legumes. This suggests that those that feed upon leaves, flowers, and seeds could have made a recent host shift to buckwheats from legumes.

It is surprising that no other butterfly family has become adapted to buckwheats as caterpillar foodplants, particularly considering their