

Habitat: *Lycaena heteronea clara*
(Lepidoptera: Lycaenidae)

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The Southern California butterfly *Lycaena heteronea clara* Henry Edwards, illustrated on the cover of this issue, has a rather restricted distribution in Kern, Ventura, and Los Angeles Counties, from the Mount Pinos area east to the Tehachapi Mountains, with isolated records to the north (Piute Peak) and south (Silverwood Lake area, San Bernardino Mountains) Orsak, L.J., 1977, Management recommendations for populations of the Bright Blue Copper Butterfly (*Lycaena heteronea clara*) of Southern California. *Atala* 4 (1-2): 10-18. ("1976"). Within this range, *clara* occurs in discrete colonies, often greatly isolated from one another; therefore it has been rarely collected. Although rareness is often associated with extreme specialization, *clara* inhabits a fairly wide elevational span and utilizes three *Eriogonum* species (Polygonaceae) as larval foodplants. The presence of abundant food-plant, however, does not necessarily indicate the presence of *clara*; foodplant quality is also important (Orsak op. cit).

In O'Neil Canyon (figure 1) and adjacent large canyons near Lebec, *clara* inhabits flat areas ranging from 3000-4750 feet (917-1452 meters) in altitude where *Eriogonum fasciculatum* var. *polifolium* (Bentham) Stokes is present and often dominant among scattered *Quercus lobata* Nee trees.

At the east end of Frazier Park (figure 2) and other sites throughout Cuddy and Lockwood Valleys at elevations from 3950-5400 feet (1208-1651 meters), *clara* inhabits the juniper-Pinon Woodland Community of Vasek and Thorne, Vasek, F. C. and R.F. Thorne (1977 Transmontane coniferous vegetation. pp. 797-832 in Barbour, M.G. and J. Major (eds.), *Terrestrial Vegetation of California*. Wiley-Interscience). *Eriogonum fasciculatum* is common among the dominant shrubs *Artemisia tridentata* Nuttall and *Chrysothamnus nauseosus* (Pallas) Britton, and the occasional trees *Pinus monophylla* Torrey & Fremont and *Quercus chrysolepis* Leiberg. Many such colonies are adjacent to or within dry washes, where females preferentially oviposit on *Eriogonum heermanii* Durand and Hilgard.

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Fig. 1. O'Neil Canyon, near Lebec, Kern County, California.



Fig. 2. East end of Frazier Park, Kern County, California.



Fig. 3 Northwest slope of Frazier Mountain, elevation 6750 feet, Ventura County, California.

Near the summit of Frazier Mountain (figure 3), and at many locations in Lockwood Valley, at elevations between 5200-7900 feet (1606-2431 meters), *clara* colonies utilize *Eriogonum umbellatum* var. *munzii* Reveal as larval foodplant. At lower elevations, hillside clearings in forests of *Pinus monophylla* are inhabited, while colonies at higher elevations occur in rocky outcrop openings in Yellow Pine forest (*Pinus ponderosa* Lawson; *Pinus jeffreyi* Greville & Balfour).