FURTHER EASTWARD EXTENSION OF THE RANGE OF *EUCHLOE AUSONIDES MAYI* (PIERIDAE) IN ONTARIO

Euchloe ausonides mayi Chermock & Chermock, is first known to have been collected in Ontario near the Manitoba border in 1947. Riotte (1968, J. Lepid. Soc., 22: 40) has traced the eastward extension of its range which reached Geraldton by at least 1966. In this locality he had collected extensively until 1958 without seeing it. In 1965 I collected the species on Manitoulin Island, Ontario, 330 miles southwest of Geraldton for the first time in spring. That year, and again in 1966, 1967 and 1968, this species first appeared during warm weather in the second week of May, remaining common until the month's end. No June collecting has been done, and the species has never been seen there during July. All records are from the limestone barrens in Burpee Township near the shore of Lake Huron, where the insect flies close to ground in sunny clearings in the juniper-white cedar-white spruce—poplar scrub known locally as "prairies." *Arabis drummondi*, a known host, is frequent in this habitat. Identification of the butterflies has been confirmed by J. C. E. Riotte, and two specimens taken May 13, 1968 have been placed in the collection of the Royal Ontario Museum, Toronto. It may be that the species, which is now common around Fort William, Ontario, proceeded along the north shore of Lake Superior to the east and thence to Manitoulin Island.

RONALD R. TASKER, *12 Cluny Dr., Toronto 5, Ontario.*

COURTSHIP AND MATING BETWEEN *CHLOSYNE NEUMOEGENI* AND *CHLOSYNE CALIFORNICA* (NYMPHALIDAE)

The ranges of *Chlosyne neumogeni* (Skinner) and *Chlosyne californica* (Wright) overlap in certain areas of southern California. In many of the desolate mountain ranges of the Mojave Desert both species can be found flying together. While on a collecting trip to the Providence Mountains, I discovered that both *C. neumogeni* and *C. californica* were breeding in the area. After hiking out of Bonanza King Mine Canyon on April 20, 1969, I noticed large numbers of these two species of butterflies fluttering around flowering bushes. It was at the entrance of this canyon, at an elevation of approximately 4,000 ft., that I observed courtship between these two species. I saw battered *C. neumoegeni* males chasing *C. californica* females in the air. When these females alighted upon flowers, with spread wings, the males would hover a couple of inches above them. Later that afternoon, I began hiking towards Gilroy Canyon, about a mile south of Bonanza King Mine Canyon. Climbing down the side of a ravine into a dry streambed, I spotted two mating *Chlosyne* resting together on a flowering bush. Upon closer observation, I noticed that the two butterflies in copulation were a male of *C. neumoegeni* and a female of *C. californica.*

No examples of courtship and mating between male *C. californica* and female *C. neumoegeni* were observed in the Providence Mountains at this time. Also, *C. californica* appeared to be approximately eight times more common than *C. neumoegeni* in this region. *C. californica* seemed to be at the peak of its flight period, because more than half of the specimens captured were fresh. *C. neumoegeni* seemed to be in the latter part of its flight period, because most specimens were worn. One wonders if these factors might be partially causative of this rare phenomena of courtship and mating between two distinct species.

RICHARD C. PRIESTAF, *5631 Cielo Ave., Goleta, Calif.*