

## CALLOPHRYS ERYPHON (LYCAENIDAE) IN MAINE

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On the basis of several specimens of a large, boldly marked *Callophrys* recently examined and determined by Mr. J. D. Lafontaine and Mr. Harry K. Clench, *Callophrys* (*Incisalia*) *eryphon* (Boisduval) is here reported to be established in a small acid bog located in western Maine.

Clench (*in* Ehrlich & Ehrlich, 1961) summarizes the eastern range of *C. eryphon* as "eastward to Rockies, Nebraska and northern Manitoba." Klots (1951) does not include *C. eryphon* as occurring east of the Great Plains, nor is it mentioned in his list of casual species. In the past decade however, the species has been discovered to occur much farther east. Recent eastward records include Port Hope, Ontario (Riotte, 1967); Pine Co. (Masters, 1972) and Cook Co. (Huber, 1966), Minnesota; and Chippewa and Luce counties, eastern upper peninsula of Michigan (Nielsen, 1966). The recent Maine checklist (Brower, 1974) contains no mention of *C. eryphon*.

The bog, Black Spruce—sphagnum heath, is roughly 3–5 acres in extent, and is located adjacent to state Rt. 16, east of the Maine–New Hampshire border, approximately 6 mi. S of Wilsons Mills, near the confluence of the Diamond and Magalloway rivers. The area is approximately 1,260 ft. in elevation and surrounded by low mountains. The bog supports a rather dense growth of Black Spruce (*Picea mariana*), Tamarack (*Larix laricina*) and other typical associate plants, e.g., Labrador Tea (*Ledum groenlandicum*), Rhodora (*Rhododendron canadense*), laurel (*Kalmia* sp.), Bog Rosemary (*Andromeda glaucophylla*), various other heaths, grasses and sedges. From early to mid-June *Oeneis jutta* Hübner occurs here, along with an unusually productive colony of *Callophrys augustinus augustinus* (Westwood), and the proliferation of flowering plants attract a variety of other Canadian Zone butterflies in the late spring. Ease of access has made the area a popular collecting spot with numerous New England entomologists.

During two trips to the bog on 8 and 9 June 1974, a good series of *C. eryphon* was taken, both sexes being fairly common. A number of these were later positively identified by Mr. Lafontaine and Mr. Clench. A small series of the same catch was also deposited in the Dartmouth College Museum Collection.

The presence of *Callophrys eryphon* this far east raises a number of

questions concerning (1) sympatry with *C. niphon clarki* Freeman, (2) significance of the bog environment and (3) larval food plant.

I recently re-examined the series of *C. eryphon* now in the Dartmouth College Collection to check the possible inclusion of *C. niphon*. All specimens in the series (7 males, 4 females in fresh to slightly worn condition) appear to be *eryphon*, suggesting that at least within the bog confines, *niphon* does not occur. Locally, however, *C. niphon* is generally common, usually in association with pine woods and occasionally exhibiting local outbreaks (Grey, 1967).

The observed association of this *C. eryphon* colony with a bog needs further clarification. It may be merely apparent, being presently known only from this one locality, and may display other habitat preferences if and when other colonies are uncovered. It should be noted that the Bog Elfin, *C. lanoraieensis* Sheppard, well known from large bogs of north central Maine, does not occur here.

Various endemic pines are listed as food plants for *C. eryphon* in the western montane regions. Other pines are recorded in the east for *C. niphon*: Klots (1951) suggests "probably only 'hard' pines, i.e. *virginiana*, *rigida*, etc., not White Pine (*P. strobus*)", although Ferguson (1954) does not rule out the possibility of this latter species. The common native pines appear to be almost wholly lacking at the Wilsons Mills locale, therefore, it appears possible that something entirely different, perhaps one of the spruces could serve as the host. Nearly all of the *C. eryphon* collected were taken on or near young Black Spruce, the butterflies often alighting on the fresh terminal growth. McGugan (1958) includes White Spruce (*Picea glauca*) as a larval collection source for *C. niphon clarki*, suggesting spruce as an alternate choice for both butterflies. Clearly, however, the matter will remain in question until further observations and life history work can be conducted.

The discovery of *Callophrys eryphon* in the east will doubtless generate continued intensive searches for additional colonies of this "western" butterfly. Collectors having specimens of northern New England *niphon* should check their material carefully and forward any suspect examples along with data to Mr. Clench for determination.

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#### LITERATURE CITED

- BROWER, A. E. 1974. A list of the Lepidoptera of Maine—Part I, the Macrolepidoptera. Life Sci. Agric. Exp. Sta., Univ. Maine at Orono. 136 p., 3 figs., 1 map.
- EHRlich, P. R., & A. H. EHRlich. 1961. How to know the butterflies. William C. Brown Co., Dubuque, Iowa. 262 p., 525 figs.
- FERGUSON, D. C. 1954. The Lepidoptera of Nova Scotia. Proc. Nova Scotian Inst. Sci. 23(3): 375 p., 7 figs., 16 pls., 1 map.
- GREY, L. P. 1967. Maine in Season Summary. NEWS Lepid. Soc. No. 3, p. 14.
- HUBER, R. L. (compiler). [1966.] Minnesota 1965 annual butterfly summary. 11 p., hectographed.
- KLOTS, A. B. 1951. A field guide to the butterflies of North America, East of the Great Plains. Houghton Mifflin Co., Boston. 349 p., 40 pls.
- MASTERS, J. H. 1972. Butterfly records for three northeast Minnesota counties Aitkin, Carlton, and Pine Counties. Bull. Assoc. Minn. Ent. 5(2): 19–26.
- MCGUGAN, B. M. (compiler). 1958. Forest Lepidoptera of Canada recorded by the Forest Insect Survey, Vol. I—Papilionidae to Arctiidae. Forest Biology Division, Canada Dept. of Agriculture. 76 p., 46 figs.
- NIELSEN, M. C. 1966. Occurrence of *Callophrys eryphon* (Lycaenidae) in Michigan. J. Lepid. Soc. 20: 41–42.
- RIOTTE, J. C. E. 1967. New and corrected butterfly records for Ontario and for Canada. J. Lepid. Soc. 21: 135–137.

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#### MATHILDANA NEWMANELLA (OECOPHORIDAE) IN ARKANSAS

Through the courtesy of H. N. Greenbaum (Department of Entomology, University of Arkansas), I recently have been able to examine moths collected with a Malaise trap set up 24 hours a day in Fayetteville, Washington Co., Arkansas. Among the moths collected 22–26 May 1975 were two females of *Mathildana newmanella* (Clemens). Hodges in his recent revision of the North American Oecophoridae (1974, Moths Amer. North of Mex., Fasc. 6.2: 122), reported this moth, originally described from Virginia, as occurring from Quebec to North Carolina and extending west only to southern Ohio. The new record from western Arkansas considerably extends the known range of *M. newmanella*, and, with the range of the deciduous forests ending only a little farther west, this may be near the western limits of its distribution. *M. newmanella* may be a diurnal flier, as are related species such as *Esperia sulphurella* (Fabricius).

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