

ENDANGERED SPECIES

Status: State Rare Candidate for Federal Listing

TAWNY CRESCENT

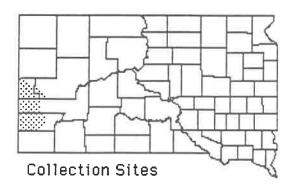
(Phyciodes batesii)

Description

This butterfly's wingspan is 1.25 to 1.5 inches (3.1 to 3.8 cm.). In coloration, the tawny crescent butterfly is very similar to the pearl crescent, P. tharos and the field crescent, P. campestris. In the Black Hills, these three may interbreed producing some specimens that are difficult to identify. On the upper surface of the forewing the post-median orange band is paler than the submarginal one. Beneath, the forewing is orange with a large median black patch on the hind margin. The underside of the hindwing is almost entirely unmarked yellow with the small brownish submarginal spots in the spaces between the veins. The antennae of the tawny crescent have black tips.

Distribution

The tawny crescent ranges from New





England, Ontario, and southern Quebec south to Georgia and west to Nebraska and the Dakotas. It is an extremely localized species that has apparently disappeared for unknown reasons from much of its eastern range.

South Dakota Records: The tawny crescent has been recorded only from the Black Hills counties of Custer, Lawrence, Meade, and Pennington.

Habitat: In South Dakota this species occurs in moist meadows and stream bottoms near forest openings and is associated with areas that contain big and little bluestem grasses.

Natural History

Life cycle: There is a single generation of this butterfly each year, with adults flying from early June through July. The eggs are laid in clusters under leaves of the host plant. The larvae feed gregariously and spin silken webs over

the plant, over-wintering when half grown. By late spring, the mature larvae are brown, tinted with pink, and have heavy black stripes and many white-tipped dark spines. At last, the caterpillar sheds its skin and forms a light, mottled-brown chrysalis, from which the adult emerges in about two weeks.

Behavior: The tawny crescent may be observed taking moisture at puddles along with groups of other butterflies such as rustic blues (Agriades rusticus).

Adult Nectar Sources: The tawny crescent is known to take nectar at dogbane and composite flowers.

Larval Host Plants: The larvae feed on asters. The small blue aster (Aster simplex) is mentioned as a possible larval host plant in Manitoba.

Significance

Values of the tawny crescent butterfly to humans are principally aesthetic and scientific. This attractive butterfly can be approached easily and observed by butterfly watchers and photographers. A scientific study conducted in the Black Hills documented hybridization between this species and its close relatives mentioned above.

Conservation Measures

This butterfly is a candidate for listing as a federally threatened species. In the Black Hills, overgrazing by livestock, road construction and surface mining, especially when conducted near stream bottoms and springs, may pose threats to the species.

Glossary

Chrysalis - inactive stage of butterflies in which the larva transforms into an adult form; pupa. Gregariously - feeding and living in large groups.

Larvae - the immature, wingless, and often worm-like forms in which certain insects hatch from the egg, and in which they remain, with increase in size and other minor changes, until they assume the chrysalis stage. Butterfly and moth larvae are also known as caterpillars. Singular: larva.

References

Ferris, C. D. and F. M. Brown. 1981. Butterflies of the Rocky Mt. States. U. of Okla. Press, Norman, OK. Opler, P. A., and G. O. Krizek. 1984. Butterflies East Of The Great Plains: An Illustrated Natural History. Johns Hopkins University Press, Baltimore, MD.

Pyle, R. M. 1984. The Audubon Soc. Handbook For Butterfly Watchers. C. Scribner's Sons, New York.
Pyle, R. M. 1981. The Audubon Soc Field Guide To North Am. Butterflies. A. A. Knopf, New York.
Royer, R. 1988. Butterflies of N.D.: An Atlas And Guide. Minot State Univ. Science Mono. No. 1.
Van Bruggen, T. 1983. Wildflowers, Grasses And Other Plants of The Northern Plains And Black Hills.
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Publication of the Tawny Crescent fact sheet was funded by the Prairie Pothole Joint Venture of the North American Waterfowl Management Plan.