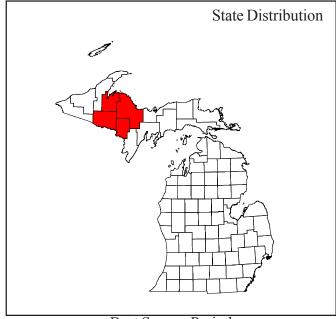
## Erebia discoidalis Kirby

## **Red-disked Alpine**





Best Survey Period

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Status: State special concern

Global and State Rank: G5/S2S3

Family: Nymphalidae

**Total Range:** Red-disked alpine is a Holarctic species that occurs from Alaska east to the Hudson Bay and Quebec, and in the northern parts of North Dakota, Minnesota, Wisconsin, and Michigan (NatureServe 2006).

**State distribution:** Red-disked alpine is restricted to counties in the central-western Upper Peninsula. The only extant site currently known in Michigan is in Iron County (Michigan Natural Features Inventory, Biotics database). There are historical records from Dickenson, Marquette, and Baraga Counties.

Recognition: This small butterfly is blackish-brown with a distinctive orange-red patch on the forewing. Male forewings ranged from 2.0—2.3 cm (Opler and Krizek 1984). Larvae are green with light colored lines (Nielsen 1999).

Best survey time: Red-disked alpines are most likely to be found either in the early morning hours or late in the day (Masters 1971) during the month of May. During the morning hours, they are usually encountered along bog edges or close to trees; in the evening they move into the open areas (Masters 1971), avoiding the midday sun (Nielsen 1999). Adult are attracted to bait traps (Nielsen 1999).

**Habitat:** This species prefers bogs with large, open meadow areas with abundant cotton grass (*Eriophorum* spp.) and few trees (Masters 1971, Nielsen 1999).

**Biology:** Red-disked alpines are univoltine, with peak flight periods in late May (Masters 1970).

Caterpillars have been reared on cotton grass; their natural hostplant in Michigan is unknown (Nielsen 1999). In Manitoba, red-disked alpines utilized the grass species *Poa lucida* as a larval host (Masters 1970). Adults most likely feed on plant sap and soil moisture (Nielsen 1999).

Red-disked alpines stay close to the ground, with a slow, weak flight pattern (Masters 1970). When startled, they will rise into the wind to be swept away, or drop suddenly and "disappear" in the dense vegeta-



Michigan Natural Features Inventory P.O. Box 30444 - Lansing, MI 48909-7944 Phone: 517-373-1552 tion. Red-disked alpines perch low in the vegetation on grass or sphagnum (Masters 1970). They display crepuscular flight patterns (before 10:00 am or after 4:00 pm) (Masters 1970).

**Conservation/management:** The mining of peat from bogs is currently the greatest threat to the species. Changes to hydrology can also negatively impact bog habitats, and known sites should be protected from both forms of alteration.

**Research needs:** Information on life history including metapopulation dynamics, population ecology, larval and adult foodplants, and distribution is needed rangewide.

**Related abstracts:** Muskeg, poor conifer swamp, northern bog.

## **Selected references:**

Masters, J. H. 1970. Ecological and distributional notes on *Erebia discoidalis* (Satyridae) in the North Central States. Journal of Research on the Lepidoptera **9(1)**:11-16.

NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.1. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: March 19, 2007).

Nielsen, M. 1999. Michigan Butterflies and Skippers. East Lansing, MI: Michigan State University Press.

Opler, P. and G. Krizek. 1984. Butterflies East of the Great Plains. John Hopkins University Press.

## **Abstract citation:**

Barton, B. J. 2007. Special animal abstract for Reddisked Alpine Butterfly (*Erebia discoidalis*). Michigan Natural Features Inventory. Lansing, MI. 2 pp. Copyright 2007 Michigan State University Board of Trustees. Michigan State University Extension is an affirmative-action, equal-opportunity organization. Funding for abstract provided by the Michigan Department of Transportation.