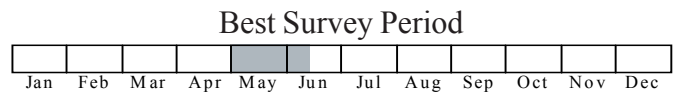
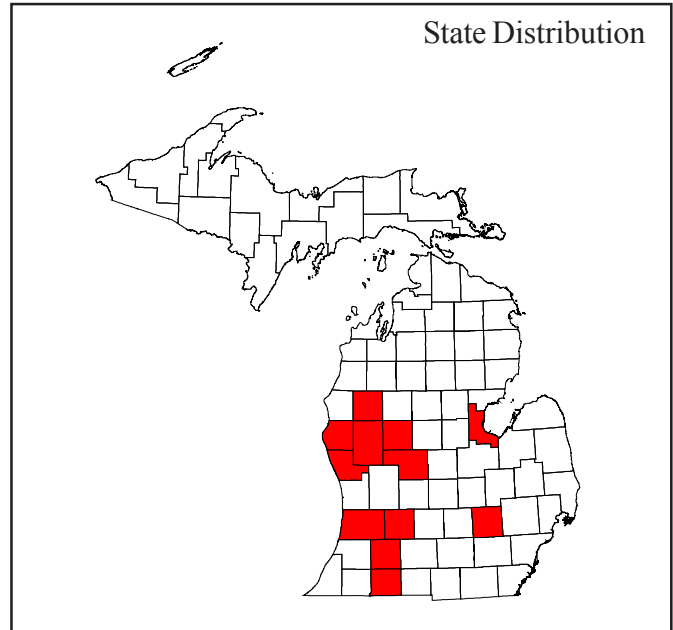




Photo by Mike Reese



Status: State threatened

Global and State Rank: G5/T1T3/S3

Family: HesperIIDae

Total Range: The historical range of Persius duskywing lies within a narrow band from Wisconsin to New Hampshire, extending south into Virginia (NatureServe 2006). Presently, the species occurs mainly in Michigan and Wisconsin.

State distribution: Persius duskywing presently occurs in the western half of the southern Lower Peninsula (Michigan Natural Features Inventory, Biotics database). Their historical range included Allegan, Bay, Ionia, Kent, and Livingston Counties (MNFI, Biotics database); Nielsen (1999) included southeast Michigan.

Recognition: Persius duskywings have the typical markings of duskywings; **dark brown upper wing surfaces** with characteristic **subapical white spots aligning basally in a straight line** (Nielsen 1999). Male forewings have **abundant white hairs** on the basal and distal areas (Iftner et al. 1992, Nielsen 1999). Male forewings average 1.6 cm; female forewings 1.7 cm (Opler and Krizek 1984). Persius duskywings are easily confused with other duskywings in flight. Similar

species include wild indigo duskywing (*Erynnis baptisiae*) and columbine duskywing (*E. lucilius*). Persius duskywings are most easily recognized by the white hair-like scales covering the dorsal forewings (Iftner et al. 1992).

Best survey time: Early May – early June

Habitat: Rangewide, Persius duskywings are found in jack pine barrens, pitch pine-scrub oak barrens, and scrubby ridgetops (NatureServe 2006). In Michigan, they occur in oak-pine barrens, adjacent prairies, and trails and utility rights-of-ways through barrens (Nielsen 1999).

Biology: Persius duskywing is a diurnal, single brooded species. Females oviposit during mid-day on sun exposed lupine (*Lupinus perennis*) during the flight period (Iftner et al. 1992). Larvae are fully mature by July and overwinter in this stage (Nature Serve 2006). Pupation occurs in early spring.

Persius duskywings are often observed flying around and landing on lupine, and exhibit erratic flight when startled (Iftner et al. 1992). They have been recorded traveling down paths, landing on sand, pebbles, and dead leaves, but never on projecting twigs (Nature Serve 2006). Males are not territorial (Nature Serve 2006).



The larval foodplant in Michigan is wild lupine (Nielsen 1999) and *Baptisia tinctoria* in southern New England and Pennsylvania (Nature Serve 2006). Adults nectar on blueberry (*Vaccinium* spp.), wild crab (*Malus coronaria*), wild lupine (*L. perennis*), downy phlox (*Phlox pilosa*), wild plum (*Prunus americana*), and bird foot violet (*Viola pedata*) (Nielsen 1999).

Conservation/management: *Persius* duskywings are listed as a State Threatened species in Michigan. There are 15 extant sites; all but two are on State or Federal lands (MNFI, Biotics database). There are an additional 15 historic records.

The greatest threats to *Persius* duskywings are habitat loss due to succession and development, invasive species, deer browsing on foodplants, overcollecting (unintentional due to confusion over identification), off-road vehicle (ORV) use in habitat, and the misuse of prescribed fire (Nature Serve 2006). Additional threats include herbicide and Bt applications (gypsy moth spraying). *Persius* duskywing sites should be protected from these threats as well as mowing during the spring and summer months.

Research needs: Inventories are needed to accurately assess the status of the species rangewide. Additional research on metapopulation structure is advised. Understanding the implications of management activities on *Persius* duskywing populations is critical in order to best conserve the species and its habitat.

Related abstracts: Dry sand prairie, oak barrens, oak openings, oak pine barrens, woodland prairie, and pine barrens.

Selected references:

Iftner, D., J. Shuey, and J. Calhoun. 1992. Butterflies and Skippers of Ohio. Ohio Biological Survey Bulletin **9(1)**:39.

NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: May 17, 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:

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