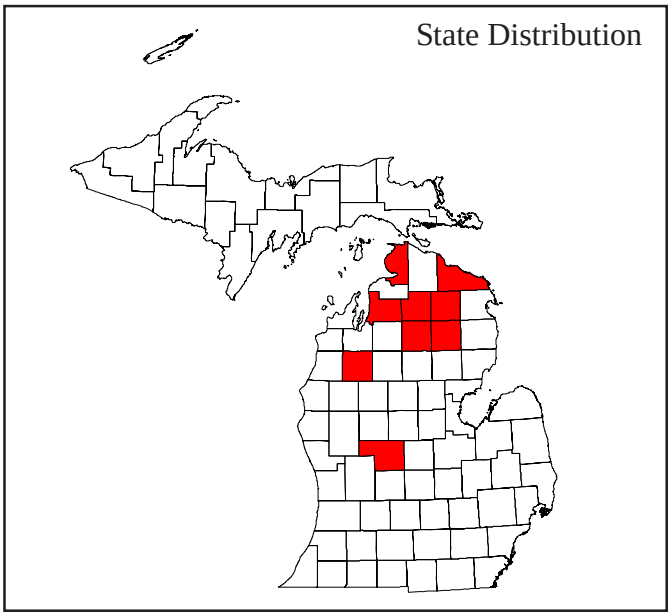
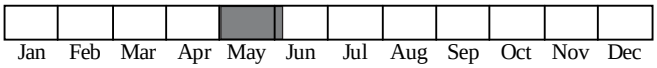
Pyrgus centaureae wyandot (W.H. Edwards) grizzled skipper

Photo by: Jeffrey S. Pippen



Best Survey Period



Status: Special Concern

Global and state rank: G1G2Q/S1S2

Other common names: Appalachian grizzled skipper

Family: Hesperiidae (skippers)

Taxonomy: Some consider the subspecies *wyandot* to be a full species. Michigan populations differ from typical *wyandot* in foodplant and habitat as well as adult and larval appearance (Allen 1997) and it is very likely that the Michigan populations are not the taxon *wyandot* (NatureServe 2007).

Total Range: The grizzled skipper is a northern species that occurs in scattered populations in the boreal regions of North America and Eurasia (Allen 1997). In North America, it is known from Labrador, British Columbia, and Alaska, south in the Rocky Mountains to New Mexico. The subspecies *wyandot* is found in Michigan and New York and southward in the Appalachian Mountains to North Carolina and Kentucky (Allen 1997).

State distribution: Known from a total of 16 sites in northern lower Michigan representing the following counties: Antrim, Montcalm, Emmet, Cheboygan, Presque Isle, Oscoda, Otsego, Montmorency, Crawford, Kalkaska, Newaygo, Wexford. We currently classify only six sites as being extant (records more recent than 1985) (MNFI 2007).

Recognition: The grizzled skipper has a wingspan between 22-32 mm (7/8 -1 1/4 in) (Allen 1997). **Dorsally they are dark brown, black above, with white spots across the forewing**. The undersurface is similarly marked but with more and larger spots and white lines (Nielsen 1999). **The fringes are boldly checkered.** The similar common checkered skipper (*Pyrgus communis*) is lighter in color, flies later in the year, and occurs more commonly in southern Michigan.

Best survey time: The single brooded, adult flight period for the grizzled skipper occurs in May to early June with extreme collection dates of May 3 to June 8. The best way to survey for this species is by meandering thorough potential habitat while checking potential nectar sources or damp soil or mud puddles. This skipper flies very close to the ground and can be difficult to observe in the field.

Habitat: In Michigan, the grizzled skipper occurs in openings in oak/pine woods with sandy soils, adjacent fields and coastal alvars. Typical dispersal corridors likely include pipelines and powerline right-of-ways.

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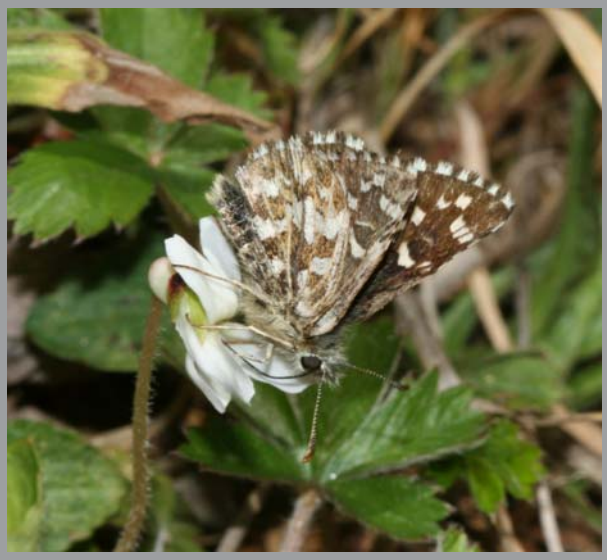
These areas are usually dominated by grasses such as little bluestem (*Schizachyrium scoparium*), Pennsylvania sedge (*Carex pennsylvanica*), and other low grasses and usually contain ample larval host plants (wild strawberry, *Fragaria virginiana*). In Appalachian states Canada cinquefoil (*Potentilla canadensis*), is the larval host plant.



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Biology: The grizzled skipper has a single generation each year (univoltine), with adults emerging in mid to late May with adults in some years still on the wing until early June. Adults can be difficult to find due to their typical low flight, short adult lifespan, and cryptic coloration. Males perch on low plants and on open ground. Females lay a single, pale green egg on the underside of the host leaf, then move on to a new leaf a few feet away to lay another single egg. Egg laying occurs from midday through 4:00pm (Allen 1997). The slowing growing larvae live in leaf shelters and do not reach full size until August (Allen 1997). The larvae in Michigan are tan to pink in color instead of green (Allen 1997). Adults nectar at flowers of a variety of low growing plants like Canadian cinquefoil, wild strawberry, blueberry (*Vaccinium*), spring beauty (*Claytonia*), bird's foot violet (*Viola pedata*), and phlox (*Phlox subulata*). Larvae pupate in late summer and spend the winter in leaf shelters (Allen 1997).

Conservation/management: Habitat protection and enhancement are essential to the conservation and long-term survival of the dusted skipper in Michigan. Habitat destruction from non-consumptive recreation (ORV use), loss of habitat due to encroachment by woody plants, limestone mining, and development continues to threaten this species. This skipper has been declining in the east due to the widespread spraying for gypsy moth (Allen 1997). Immediate action should be taken to protect existing populations from further habitat degradation and loss. Fire suppression has encouraged the closing of formerly open-canopied oak and oak-pine barrens and reduced the size and quality of adjoining open lands or prairies. Managing the prairie and barrens communities, especially through carefully controlled, prescribed burns, is critical to the long-term survival of the skipper. Prior to beginning a burn management program, the location and extent of habitat use of populations of the grizzled skipper and other rare plant and animal species should be determined. Burn management units should be established with special attention to micro-geographic variation in the distribution of rare species and their host plants (Opler 1981). Dividing sites into several management units, burned in a rotation, should assure that a substantial fraction of the population is unexposed to fire in any prescribed burn. For division to be effective, however, actual skipper habitat within a site has to be determined so that it will be divided among the units (Dana 1991).

Research needs: In Michigan the grizzled skipper has not been seen in recent years at many of the sites with previous records. Therefore, a first step would be to re-survey for them. Additional habitat should be systematically surveyed as well. Most of the research on this species has been conducted in the Appalachian states. Therefore, more life history studies need to be conducted in the Great Lakes region before more specific management recommendations can be provided. Studies should focus on larval ecology, population dynamics, dispersal capabilities of adults, and information on habitat requirements other than foodplants. Very site specific studies should look at where the skipper occurs on the site before any burn regimens are implemented. Any information on speed of recolonization after prescribed burns would be useful. This information can be used to better design management units and burn rotations.

Related abstracts: oak barrens, oak openings, alvar, sand prairie

Selected references

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Abstract citation

Cuthrell, D.L. 2007. Special animal abstract for *Pyrgus centaureae wyandot* (grizzled skipper). Michigan Natural Features Inventory, Lansing, MI 3 pp.

Funding for abstract provided by the Michigan Department of Transportation.