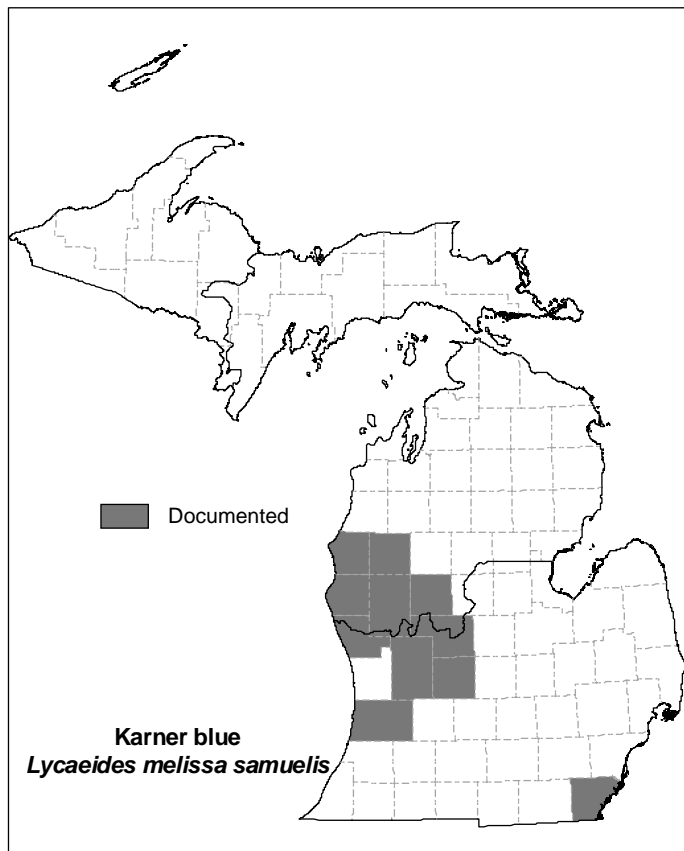


INSECTS



Karner blue

(Lycaeides melissa samuelis)

DISTRIBUTION & ABUNDANCE: State and federally listed as endangered. Restricted to lupine rich savanna areas in southwest Michigan, but it is locally abundant where habitat is available. A historic population in Monroe County is presumed to be extirpated. Overall it is considered rare and imperiled in the State.

ASSOCIATED LANDSCAPE FEATURES: prairie; idle/old field; hayland; right-of-way; savanna; dry hardwood; dry conifer; forest opening; edge

ASSOCIATED THREATS: climate change; conversion to agriculture lands; disease, pathogens, & parasites; altered fire regime; fragmentation; grazing & mowing patterns; incompatible natural resource mgmt; industrial/residential/recreational development; invasive plants & animals; non-consumptive recreation; other biological interactions (too many deer); pesticides & herbicides; removal of wildlife

COMMENTS: Need to determine population responses to various management regimes. Prescribed fire is an important management tool, but care should be taken to ensure that occupied areas are only partially burned. Protection and recovery efforts must consider the status of its host plant, lupine (*Lupinus perennis*). Recovery efforts must deal with connectivity between habitat patches. ORV and foot traffic should be redirected around occupied areas. Gypsy moth spraying may also pose a threat.