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Euphyes dukesi (Lindsey), 1923 Dukes' Skipper (Hesperiidae: Hesperiinae)

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SUMMARY

Dukes' Skipper is found in scattered locations across the eastern United States and southeastern Canada. Populations are fragmented throughout its distribution and it is uncommon everywhere in its range. It can be found in a variety of moist habitats with long grass, such as marshes or ditches, but the primary habitat is patches of sedge—its main larval hostplant—in forested swamps. Dukes' Skipper deserves conservation efforts wherever it is found. Its forested wetland habitat should be protected from drainage, logging, and spraying.

CONSERVATION STATUS Xerces Red List Status: Vulnerable Other Rankings:

a Ransings.		
	Canada – Species at Risk Act:	None
	Canada – provincial status:	None
	Mexico:	N/A
	USA – Endangered Species Act:	None
	USA – state status:	MI: Threatened
	NatureServe:	G3
	IUCN Red List:	N/A

SPECIES PROFILE

DESCRIPTION

Dukes' Skipper is in the family Hesperiidae (skippers). It is a medium-sized butterfly with a wingspan of 38 to 45 mm ($1\frac{1}{2}$ to $1\frac{3}{4}$ inches).

The uppersides of the wings is sooty black (fading to dark brown on dead specimens. On the males the wings are unmarked apart from a black stigma on the forewing. On

females, the forewing has a few pale spots. On the underside, the hindwing is paler, more brown in color with a yellow streak through the cell.

TAXONOMIC STATUS

Euphyes dukesi (Lindsey), 1923. There are two subspecies, *E. d. dukesi* (Lindsey), 1923, found in the entire range except peninsular Florida, and *E. d. calhouni* Shuey, 1996, restricted to peninsular Florida.

LIFE HISTORY

Dukes' Skipper can be found in a variety of moist habitats with long grass, such as marshes or ditches, but the primary habitat is sedge patches in forested swamps. Larval hostplants are sedges, including hairy sedge (*Carex lacustris*) and shoreline sedge (*Carex hyalinolepis*). Hostplants for the Florida subspecies, *E. d. calhouni*, are narrowfruit horned beaksedge (*Rhynchospora inundata*) and millet beaksedge (*R. miliacea*).

Eggs are laid singly on under the leaves of hostplants. Caterpillars overwinter as fourth instars.

The number of broods varies with latitude. In the north (Ontario), there is a single flight period between July and mid-August. In the mid-south, there are two between June and September. In the south, the flight period is longer, allowing three broods between May and November. Adults visit open wetlands to drink nectar from flowers such as pickerelweed (*Pontederia* sp.), sneezeweed (*Helenium* sp.), hibiscus (*Hibiscus* sp.), and blue mistflower (*Conoclinium* sp.).

DISTRIBUTION

Dukes' Skipper is found in scattered locations across the eastern United States and southeastern Canada. There are three regional clusters: 1) along the Atlantic Coast from southeast Virginia to northern peninsular Florida; 2) the lower Mississippi Valley from central Missouri and southern Illinois south to the Gulf Coast; and 3) extreme southwestern Ontario, southeastern Michigan, northeastern Indiana, and northern Ohio.

It is not known if the current distribution reflects the historic range or whether the butterfly has been extirpated from areas between the existing regional clusters by massive habitat loss due to land drainage and other development.

THREATS

Land drainage leading to drying of marshes/ditches is undoubtedly a significant threat to the remaining wetland habitats. In some regions, spraying for pest control may be an issue, for example, for mosquito control in Florida. Although Dukes' Skipper prefers forested habitat, in general gypsy moth is not a pest in the areas it occupies, although logging may be a threat if it opens up shady sites.

CONSERVATION STATUS

Populations of Dukes' Skipper are fragmented throughout its distribution and it is uncommon everywhere in its range. Some populations isolated by land drainage maybe too small to persist.

Michigan lists Dukes' Skipper as Threatened.

CONSERVATION NEEDS

Dukes' Skipper deserves conservation efforts wherever it is found. Its forested wetland habitat should be protected from drainage, logging, and spraying.

RESEARCH NEEDS

Studies of dispersal and population dynamics would be valuable to assess the viability of small and isolated populations and identify significant metapopulations.

RESOURCES

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Environmental Defense; Petition to the EPA to require the planting of buffer zones of non-Bt corn around fields of genetically engineered Bt corn. <u>http://www.environmentaldefense.org/documents/239_EPAPetition_071399_Eng.htm</u> (Accessed 5/4/05)

DISTRIBUTION MAP (U.S. range)

(From: U.S. Geological Survey, Northern Prairie Wildlife Research Center. http://www.npwrc.usgs.gov/resource/distr/lepid/bflyusa/usa/478.htm; accessed 5/10/05.)

