

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Arogos skipper ( <i>Atrytone arogos</i> )			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	The Arogos skipper is a transient migrant in Wyoming, South Dakota, and Nebraska and breeds in Colorado and Kansas.  Confidence in Rank <b>High</b> or <b>Medium</b> or Low	<ul style="list-style-type: none"> <li>• <a href="http://www.natureserve.org">www.natureserve.org</a></li> </ul>
2 Distribution outside R2	C	The Arogos skipper occurs from Long Island south along the piedmont (in New Jersey and formerly Pennsylvania only) and coastal plain in a very few isolated colonies to peninsular Florida and west along the Gulf to eastern Louisiana. A separate group of populations (subspecies IOWA) occurs on the prairies from southern Minnesota and adjacent Wisconsin west to eastern Wyoming and south to Missouri, Oklahoma, Texas, and northeastern Colorado (Opler and Krizek, 1984). Subspecies IOWA east in isolated colonies to western Arkansas and western Illinois. Very patchy range (Royer and Marrone, 1992) even in the prairie region.  Confidence in Rank <b>High</b> or <b>Medium</b> or Low	<ul style="list-style-type: none"> <li>• <a href="http://www.natureserve.org">www.natureserve.org</a></li> <li>• citations in references section</li> </ul>
3 Dispersal Capability	D	The species is a metapopulation species associated with remnant natural grasslands or savannas eastward (Schweitzer, 2000; Hall, 1999) and unlikely to persist as isolated colonies there. Lack of functioning metapopulation structure may doom some "protected" prairie populations especially with frequent fires superimposed on the fragments. Species may be unable to find isolated patches of prairie.  Confidence in Rank <b>High</b> or <b>Medium</b> or Low	<ul style="list-style-type: none"> <li>• citations in references section</li> </ul>
4 Abundance in R2	D	Local and usually uncommon from New Jersey to Florida, westward to Texas, eastern Colorado, Wyoming and the Black Hills (Ferris 1981). A. AROGOS is now widely recognized to be, as noted by Klots (1951), "rather local and nowhere very common" (Royer and Marrone 1992). Locally abundant to common in Colorado Front Range. No real absolute numbers of this species.  Confidence in Rank <b>High</b> or <b>Medium</b> or Low	<ul style="list-style-type: none"> <li>• <a href="http://www.natureserve.org">www.natureserve.org</a></li> </ul>

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<p><b>5</b> Population Trend in R2</p>	<p><b>D</b></p>	<p>Sharp decline throughout the species' range, however, no species data for Region 2. The species is viewed as imperiled in Colorado, vulnerable in Kansas, and . Scudder (1869) named HESPERIA IOWA [ATRYTONE AROGOS IOWA] which he described as "one of the most abundant Hesperians seen in Iowa". A. AROGOS is now widely recognized to be, as noted by Klots (1951) "rather local (and) nowhere very common" (Royer and Marrone, 1992). This along with the widespread alteration, destruction and fragmentation of prairie habitats (Panzer 1988) indicates decline. Eastern subspecies is doing much worse and viable metapopulations are documented (as of 2000) only from the New Jersey Pine Barrens although perhaps a dozen isolated colonies are known extant elsewhere within the range.</p> <p>Confidence in Rank <b>High</b> or <b>Medium</b> or Low</p>	<ul style="list-style-type: none"> <li>• <a href="http://www.natureserve.org">www.natureserve.org</a></li> <li>• citations in references section</li> </ul>
<p><b>6</b> Habitat Trend in R2</p>	<p><b>A</b></p>	<p>Prairie habitats have been severely altered by agricultural conversion and other anthropogenic development. Threats continue to impact prairie habitat fragments (Panzer, 1988). Existing threats [in North and South Dakota] include agricultural conversion, overgrazing, and use of herbicides and insecticides (particularly for control of leafy spurge, Canada thistle and grasshoppers). The effect of haying or controlled burning on this species is not entirely understood. Smooth brome (BROMOPSIS INERMIS) and Kentucky bluegrass (POA PRATENSIS), two introduced and now naturalized grasses, pose a serious continual threat to all remaining native prairie sites [in the Dakotas]. Noxious exotic plants including purple loosestrife (LYTHRUM SALICARIA) and several others threaten to take over prairie wetlands (Royer and Marrone, 1992). In Colorado, mainly in foothill canyons and low ridges-- not on prairie.</p> <p>Confidence in Rank <b>High</b> or <b>Medium</b> or Low</p>	<ul style="list-style-type: none"> <li>• citations in references section</li> </ul>

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<p><b>7</b> Habitat Vulnerability or Modification</p>	<p><b>B</b></p>	<p>Fragility assumed high. Almost always found on relatively undisturbed prairies or grasslands (Opler and Krizek, 1984). Dispersive capabilities must now be assumed to be extremely low or non-existent. Isolated populations are thus quite vulnerable (Royer and Marrone, 1992). Midwestern prairie remnants persist as small "islands" scattered within vast urban, rural and industrial landscapes. There is reason to fear that the small, isolated insect populations that persist on small sites may do so precariously. Several attributes, including fluctuating population densities, poor dispersal abilities, and patchy distributions make remnant restricted insects particularly susceptible to extinction causing phenomena (Panzer, 1988). In widely separated and isolated colonies (in parts of range) (Royer and Marrone, 1992).</p> <p>Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b></p>	<ul style="list-style-type: none"> <li>• citations in references section</li> </ul>
<p><b>8</b> Life History and Demographics</p>	<p><b>A</b></p>	<p>Because of its dependence on undisturbed prairie, ATRYTONE AROGOS is one of the best ecosystem health barometers for both tall and shortgrass prairie ecosystems [in the Dakotas] (Royer and Marrone, 1992).</p> <p>Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b></p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>Initial Evaluator(s): John Sidle</p>			<p>Date: 7/9/01</p>

**National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)<sup>1</sup> to occur:**

<u>Colorado NF/NG</u>	Known	Likely	<u>Kansas NF/NG</u>	Known	Likely	<u>Nebraska NF/NG</u>	Known	Likely	<u>South Dakota NF/NG</u>	Known	Likely	<u>Wyoming NF/NG</u>	Known	Likely
Arapaho-Roosevelt NF	K		Cimmaron NG		L	Samuel R.McKelvie NF			Black Hills NF			Shoshone NF		
White River NF						Halsey NF			Buffalo Gap NG			Bighorn NF		
Routt NF						Nebraska NF			Ft. Pierre NG			Black Hills NF		
Grand Mesa, Uncompahgre, Gunnison NF						Ogalala NG						Medicine Bow NF		
San Juan NF												Thunder Basin NG		
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG	K													

<sup>1</sup> Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

## References

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