

## Arogos Skipper

*Atrytone arogos*

Contributor (2012): Brian Scholtens (College of Charleston)

### DESCRIPTION

Photo by B. Scholtens

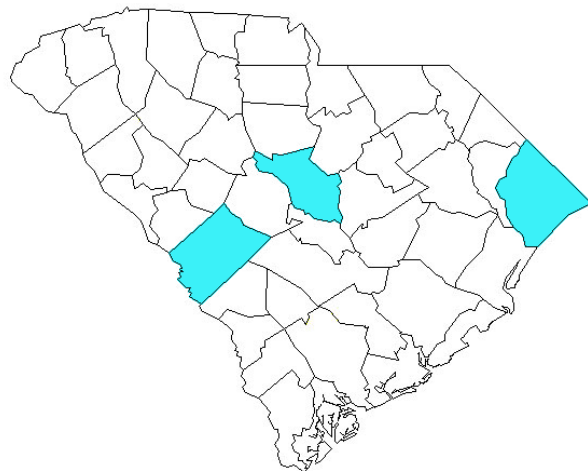
### Taxonomy and Basic Description

The Arogos Skipper (Boisduval and Leconte 1834) is the only member of its genus. The species is known in two population centers, one in the Southeast and one in the prairies of the Midwest. The species is rarely common and has apparently been declining across its range in the Southeast. In South Carolina, the species is known from primarily the Sandhills region with a single record on the Inner Coastal Plain. The last documented record was from the mid-1990s (Gatrelle 1994).

The Arogos Skipper is typical of grass skippers in its quick, darting flight. It is most similar to the Delaware Skipper (*Anatrytone logan*), with which it sometimes flies. The Delaware Skipper is typically larger, with a forewing length of 1.2-1.8 cm (0.47-0.71 in.), while the Arogos Skipper has a forewing length of 1.2-1.6 cm (0.47-0.63 in.) (Opler and Krizek 1984). The pattern on the Arogos Skipper consists of a background of light yellow-orange with washed out black borders on the wings. The underside is even yellow-orange, with yellow veins on the hindwing. In comparison, the Delaware Skipper is bright yellow-orange with distinctly black borders and veins at the end of the forewing which is highlighted in black (Cech and Tudor 2005).

### Status

The Arogos Skipper is known from Horry, Richland, and Aiken Counties in South Carolina, but the status of this species in the State is currently unknown. Gatrelle's work in the 1990s located just one population in Aiken County, but a recent survey found none (Minno, pers. comm.). Additional, more extensive surveying is warranted to determine the status of this species in the state.



### POPULATION SIZE AND DISTRIBUTION

Historically, the Eastern populations of the Arogos Skipper occurred from the New Jersey pine barrens south into Florida, and along the Gulf Coast over to Mississippi, but only from scattered localities (Opler and Malikul 1992). Relatively stable populations may still occur in Florida, but the more northern populations all seem to be declining. No estimates of population size have been made.

## HABITAT AND NATURAL COMMUNITY REQUIREMENTS

The species is a specialist on seasonally wet to dry grassland and pine savanna habitats. It seems to especially like regenerating burn sites (Cech and Tudor 2005). In South Carolina, the typical habitat is the Sandhills. The documented host plants are Little Bluestem (*Schizachyrium scoparium*), Pine Barrens Reed Grass (*Calamovilfa brevipilis*), and Lopsided Indian Grass (*Sorghastrum secundum*). There is evidently only a single brood in the north, but 2 in South Carolina, flying in April-May and July-September. The species overwinters as a partially grown larva (Cech and Tudor 2005).

## CHALLENGES

Because the status of this species in the state is unknown, extensive surveys are needed to document its distribution. It should be searched for in large areas of intact sandhills, such as the Sandhills National Wildlife Refuge, the Manchester State Forest, the Gopher Tortoise Heritage Preserve, and the Savannah River Site. Active management using burning is probably necessary to maintain habitat, but care should be exercised to make sure entire population areas are not burned in one season. There is some worry that a wildfire at the only known remaining site in North Carolina has severely damaged or eliminated this population. Burning has been documented to be temporarily detrimental to similar prairie butterflies in the Midwest (Swengel 1998). Burning does maintain appropriate habitat, and as long as there is a refuge unburned, the butterflies recolonize and build back large populations on the burned site. There is also evidence that seasonal mowing or haying could be an alternate strategy to maintain the habitats (Swengel 1998), but this may not be appropriate in all situations.

## CONSERVATION ACCOMPLISHMENTS

No conservation work has been done on this species in South Carolina. Schweitzer has worked most extensively on New Jersey populations.

## CONSERVATION RECOMMENDATIONS

- Conduct surveys to determine the distribution of the Arogos Skipper in South Carolina.
- Monitor any identified populations of the Arogos Skipper, particularly with regard to the use of fire as a management tool.
- Explore the need to list Arogos Skipper in South Carolina, based on survey results.

## MEASURES OF SUCCESS

As research and management needs are identified, projects will be initiated to address those needs.

## LITERATURE CITED

Cech, R. and G. Tudor. 2005. Butterflies of the east coast, and observer's guide. Princeton University Press, Princeton, NJ. xii + 345 pp.

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- Swengel, A. B. 1998. Effects of management on butterfly abundance in tallgrass prairie and pine barrens. *Biol. Cons.* 83: 77-89.