

Pygarctia abdominalis Yellow-edged Pygarctia

FAMILY: Erebidae SUBFAMILY: Arctiinae TRIBE: Arctiini TAXONOMIC_COMMENTS: One of nine members of this genus that occur in North America (Lafontaine and Schmidt, 2010), and the only one that has been recorded in North Carolina

FIELD GUIDE DESCRIPTIONS: Covell (1984)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1960); Schweitzer et al. (2011)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Illustrated in Schweitzer et al. (2011) but detailed descriptions of the larvae appear to be lacking

ID COMMENTS: Coloration is similar to both Euchaetes egle and Pagara simplex, with wings predominantly gray and abdomen yellow or orange with a mid-dorsal row of black dots. However, both the costa and inner margin of the forewing is lined with yellow in P. abdominalis, unlike the other two whose wings are solidly gray. A good quality photograph showing the forewings should be sufficient to identify this species.

DISTRIBUTION: Restricted to the Coastal Plain, including the Fall-line Sandhills

FLIGHT COMMENT: Schweitzer et al. (2011) state that there are probably two broods over most of the range of this species. Our data indicate that adults are present throughout most of the growing season, possibly with three distinct flights.

HABITAT: All of our records come from Longleaf Pine sandhills habitats, some very xeric.

FOOD: Larvae are probably stenophagous, feeding solely on members of the Euphorbiaceae (Schweitzer et al., 2011). American Ipecac (<i>Euphorbia ipecacuanhae</i>), other spurges (<i>Euphorbia</i>), and Spurge-nettle (<i>Cnidoscolus stimulosus</i>) are all possible hosts in its sandhill habitats.

OBSERVATION_METHODS: Appears to come at least moderately well to blacklights, with up to eight being collected in a single trap; also observed at building lights. None of our records come from bait.

NATURAL HERITAGE PROGRAM RANKS: G3 S2S3

STATE PROTECTION: Listed as Significantly Rare by the Natural Heritage Program. That designation, however, does not confer any legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: Strongly associated with Longleaf Pine sandhills, a habitat that has undergone severe reduction over the past two hundred years. Populations in the New Jersey Pine Barrens appear to have been extirpated, possibly due to the effects of fire-suppression (Schweitzer et al., 2011). Without periodic fire, the low-growing forbs that they feed on can be easily swamped by taller vegetation or thick deposits of pine thatch. With increasing fragmentation of their habitats, making movement between habitat units increasingly difficult, the remnant small, isolated populations are highly vulnerable to irrevocable loss.