

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Busck (1908); Forbes (1923) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based primarily on the description by Busck (1908) and Forbes (1923). The short, ascending, labial palp is brownish-yellow and terminates before reaching the vertex. The antenna is yellowish brown and extends to about two-thirds the length of the forewing. The face, head, and thorax are light yellow to straw colored and suffused with varying amounts of darker brownish-yellow. These are often slightly lighter colored than the ground color of the forewings, which is otherwise similar. The basal one-third to one-half of the costal edge is darkened with blackish to brownish-black dusting. On some specimens, this expands at the base to form a wide band that extends to the inner margin. There are two obliquely placed blackish dots at one-third, and a series of two or three similar dark spots at about two-thirds, along with a corresponding large blotch on the costal margin. These are often fused to varying degrees to form a crooked dark band. Beyond this, there is a strongly bent, dark, subterminal band that runs parallel to the tip of the costa and outer margin. The area beyond this is suffused with dark dusting, and on some specimens the entire terminal region may appear dark. The markings tend to disappear in rubbed specimens, so expect variation depending on the degree of wear. The hindwing is whitish, and and fringe of both wings straw-colored. The abdomen is straw-colored and heavily spined, and the legs are brownish and liberally dusted with black on the exposed sides.

DISTRIBUTION: <i>Gerdana caritella</i> is found primarily in eastern North America, but scattered populations have been found in the West in British Columbia, Alberta, Saskatchewan, Oregon, Colorado and a few other locales. In the East, this species occurs in Ontario and Quebec, and in most of the eastern US from North Dakota, Kansas, and central Texas eastward to the Atlantic Coast. In North Carolina, this species is relatively common in the Piedmont, and less common in the Coastal Plain and lower valleys in the mountains. It is seemingly absent from the central and northern Coastal Plain.

FLIGHT COMMENT: The adults are active year-round in Florida, and from April through October elsewhere in areas outside of North Carolina. A seasonal peak in activity occurs in June through August. As of 2021, our record are from April through October. Local populations appear to have two or more broods per year.

HABITAT: We have records from a variety of habitats, including semi-wooded residential neighborhoods and more natural communities. Most are associated with hardwoods or mixed hardwood-pine forests.

FOOD: The feeding ecology and hosts are poorly documented. The larvae have been reared on several occasions from 'witches' brooms' on northern conifers (Clarke, 1942) and on one occasion from an owl nest. Witches' brooms are diseased or mutated masses of dense deformed twigs and foliage that form a nest-like structure on branches. Robinson et al. (2010) list Mistletoe (<i>Phoradendron</i>) as a host, but we are unaware of the literature source for this. It is uncertain if larvae feed directly on plant tissues in witches' brooms, or perhaps on decaying plant material as do many species in the subfamily Symmocinae. Prentice (1966) reported isolated instances of the adults being reared from Black Spruce (<i>Picea mariana</i>) and Colorado Spruce (<i>P. pungens</i>), but it is uncertain if they were feeding on the plant tissue or on witches' brooms. The feeding ecology of this species in North Carolina is undocumented.

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S4S5]

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

The Moths of North Carolina - Early Draft