



ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Munroe (1976) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based mostly on that of Forbes (1923). The forewing is variable and can be either luteous and heavily streaked with fuscous (especially on the veins) or mostly fuscous. There is a long black basal dash near the middle of the wing, with a pale shade above it. The orbicular is a horizontal ellipse when distinct, and is often confused with the antemedial line. It is followed by a yellow patch that is sometimes divided by a black dash that connects the orbicular and reniform spots. The antemedial line is relatively far out and is deeply dentate, with the longest tooth in the fold. The postmedial line is often represented by a series of black wedges that are conspicuous beyond the cell, where their outer sides form an even line, and their points extend in along the veins. The subterminal area is often lighter than the general ground color, and there is a double terminal line with the outer one in the fringe. The hindwing is a paler fuscous with darker veins. It has a diffuse terminal band, a single terminal line, and a light gray fringe that is darker at the base.

Munroe (1976) noted that this species is often confused with $\langle i \rangle L$. cereralis $\langle i \rangle$, but the latter is a relatively large, night-flying species that is common in croplands, while $\langle i \rangle L$. commixtalis $\langle i \rangle$ is a day-flying species that rarely strays far from its bog habitat. Size is helpful in sorting these out (forewing length = 10-12 mm for $\langle i \rangle L$. commixtalis $\langle i \rangle$ and 13-16 mm for $\langle i \rangle L$. cereralis $\langle i \rangle$; Munroe, 1976).

DISTRIBUTION: This species has boreal affinities and occurs in Alaska and throughout most of southern Canada, including the Yukon Territory and British Columbia eastward to Nova Scotia. Populations occur much more sporadically elsewhere where they occur as far south as California, Illinois, western North Carolina and northwestern South Carolina. This species is also found in the Old World in Fennoscandia and possibly into northeastern Russia (Munroe, 1976). As of 2023, we have two historical records.

FLIGHT COMMENT: The adults mostly fly from May through September in different areas of the range. As of 2023, our one dated historical record is from mid-August.

HABITAT: Munroe (1976) characterized $\leq i \geq L$. commixtalis $\leq /i \geq$ as being a mostly boreal species that prefers bogs. We have two historical records, with one being for Beutenmuller from 1912 who collected one in the Black Mountains, but did not specify the habitat.

FOOD: The host plants are undocumented.

OBSERVATION_METHODS: The adults are diurnally active and can sometimes be seen flying low over sphagnum and heath in boggy habitats.

NATURAL HERITAGE PROGRAM RANKS: GNR [SH]

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

COMMENTS: