Bucculatrix locuples None High Mt. N u m b е NC counties: 2 o f n=0Sighting or Collection High counts of: Low Mt. in NC since 2005 F 1 - Avery - 2015-06-18 1 1 - Moore - 2019-07-29 Rank Status g h NC US NC Global t D Dec а n=0 n=0 e Pd CP s

FAMILY: Bucculatricidae SUBFAMILY: TRIBE:

TAXONOMIC_COMMENTS: <i>Bucculatrix</i> is a large genus of small leaf-mining moths, with around 300 species worldwide. A total of 103 Nearctic species have been described, and many others will likely be described in the future. Braun (1963) covered 99 species in her monograph, and four additional Nearctic species have been described since then.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This is a tiny black moth with a conspicuous dark head tuft, along with two costal and two dorsal spots. The following detailed description is based on that of Braun (1963). The face is lustrous pale ocherous, and the tuft dark reddish brown to rarely paler. The eye-cap is pale ocherous, while the antennal stalk is dark fuscous with broad whitish annulations in the outer half. The thorax is reddish black. The forewings is black with lustrous pale golden spots (short streaks). Along the costa there is a triangular oblique spot before one-half the wing length, and a slightly less oblique spot at about two-thirds. Just before the middle of the inner margin, there is a triangular spot that reaches to the fold or beyond and is bordered outwardly by a large patch of black raised scales. At the tornus there is a second triangular spot. The cilia are gray, with a line of black-tipped narrow scales extending from the costa before the apex to the tornus. The hindwing is speckled with dark fuscous and the cilia are concolorous. The posterior tibia, except for the hairs, is yellowish silvery. The first tarsal segment is blackish, and the remaining segments silvery, with darker tips. The abdomen is dark bronzy fuscous above.

DISTRIBUTION: <i>Bucculatrix locuples</i> is found in eastern North America. There are a few scattered records that are from Ontario, Quebec, Massachusetts, Ohio, Kentucky, and North Carolina. As of 2021, we have only two site records. One is from the Sandhills region in Moore County and the second at a high elevation site in Avery Co.

FLIGHT COMMENT: Very little information is available on the flight season. The adults emerge in late spring or early summer after overwintering as pupae. The adults probably first appear beginning in April and May, with a possible second generation in September and October (Braun, 1963). As of 2021, our one adult record is from mid-June.

HABITAT: The larvae are specialists on alders, and presumably only use Hazel Alder in North Carolina. This species is a wetlands species that can be found is a variety of wet settings, particularly where there is substantial sun exposure. Representative habitats include stream margins, freshwater marshes, the edges of beaver ponds, and wet thickets.

FOOD: The known hosts are the introduced Gray Alder ($\langle i \rangle$ Alnus incana $\langle i \rangle$) farther north, and our native Hazel Alder ($\langle i \rangle$ A. serrulata $\langle i \rangle$) (Eiseman, 2022). The latter is the presumed host in North Carolina, and our only larval record is for this species. Green Alder ($\langle i \rangle$ Alnus crispa $\langle i \rangle$) might also be used at higher elevations in the mountains.

OBSERVATION_METHODS: The adults appear to only very rarely visit lights and most records are for leaf mines or adults reared from mines. We recommend searching alders for the mines during the summer and fall months.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S2S3]

STATE PROTECTION:

COMMENTS: As of 2021, we have only two site records. Additional information is needed on the distribution and abundance of this species within the state before we can accurately assess its conservation status.