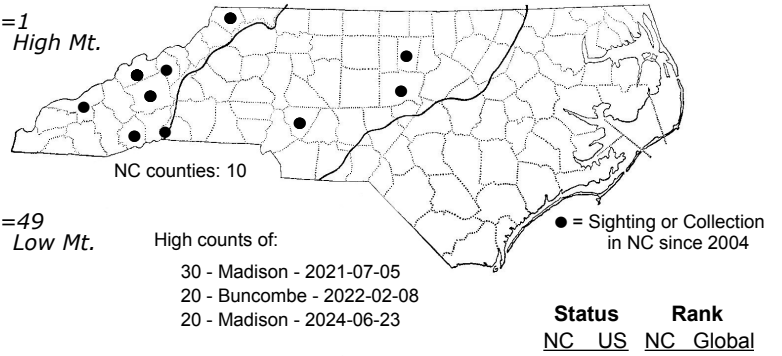
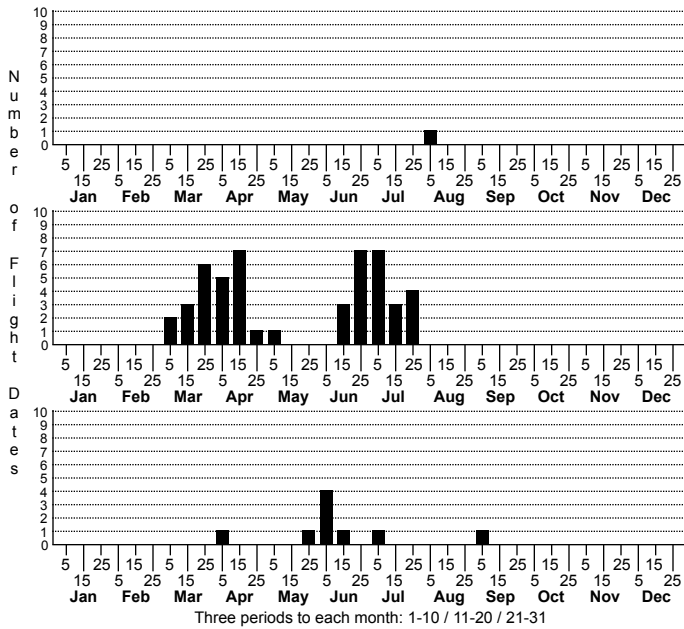


# *Argyrotaenia pinatubana* Pine Tube Moth



FAMILY: Tortricidae SUBFAMILY: Tortricinae TRIBE: Archipini

TAXONOMIC\_COMMENTS: The genus *Argyrotaenia* contains approximately 100 described species, with most occurring in Nearctic and Neotropical regions. Thirty-six species are currently recognized in North America.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923); Freeman (1960)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Freeman (1960)

ID COMMENTS: The following description is based on that of Forbes (1923) and Freeman (1960). The head and thorax are ochereous, and the dorsal tuft orangish. The forewing has three broad brownish orange to dark reddish-ochereous bands that are separated by whitish to light ochereous fascias. The first band is a large basal patch whose posterior margin extends from the dorsal margin to the costa. It fills the basal third of the wing, and is followed by a relatively narrow light fascia. The second is a broad, oblique band that begins at about one-half on the costa and extends posteriorly to the dorsal margin. It is followed by a relatively narrow, complete whitish fascia. The last band is in the subterminal area and extends from the costa to the dorsal margin. It contains the outer costal patch that is usually fused with an outer oval spot to form a complete band. The band is followed by a terminal whitish fascia that narrows towards the inner margin. The hindwing is smoky and becomes paler basally. The fringe is paler with a darker basal line. The abdomen is gray, blackish, or mouse-colored, with ochereous apical tufting that is more noticeable on the male. Many *Argyrotaenia* species have very similar genitalia and can be difficult to distinguish from each other. In this species the basal patch typically fills the entire region between the dorsal margin and costa. In addition, both the posterior edge of the basal patch and the anterior edge of the median band tend to be more straight-edged relative to some closely related forms (i.e., *A. tabularia*). This species uses Eastern White Pine as a host and is restricted to where the host is found locally.

DISTRIBUTION: *Argyrotaenia pinatubana* is found in eastern North America from southern Canada (Manitoba eastward to Nova Scotia) and the New England states southward through the Appalachian region to eastern Tennessee and northwestern South Carolina. The range extends westward in the US to Michigan, Illinois, Indiana, Ohio, and Kentucky. Populations in North Carolina are largely restricted to the Piedmont foothills and Blue Ridge Mountains.

FLIGHT COMMENT: The adults have been observed from March through November in areas outside of North Carolina, with seasonal peaks in April-May and again in July. Populations in North Carolina appear to be double-brooded, with the first brood in March and April, and the second in June and July.

HABITAT: This species is dependent on Eastern White Pine, which grows in a variety of mesic to somewhat drier forest communities. It is common in the Piedmont foothills and in the mountains at lower to mid-elevations, but becomes more spotty to the East.

FOOD: *Argyrotaenia pinatubana* specializes on conifers (Craighead et al., 1950; Schaffner, 1959; Freeman, 1960; MacKay, 1962; Prentice, 1966; Ferguson, 1975; Maier et al., 2004; Robinson et al., 2010; Eiseman, 2022). It uses a variety of conifers in Canada, including Eastern White Pine (*Pinus strobus*), Jack Pine (*P. banksiana*), Lodgepole Pine (*P. contorta*), Amabilis Fir (*Abies amabilis*), Sitka Spruce (*Picea sitchensis*), Douglas Fir (*Pseudotsuga menziesii*) and Western Hemlock (*Tsuga heterophylla*). In the eastern US it appears to rely entirely on Eastern White Pine (*P. strobus*) as its host.

OBSERVATION\_METHODS: The adults are attracted to lights, and the tubular shelters are easy to spot on pine branchlets.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S5

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

COMMENTS: Populations appear to be secure within the state due to the abundance and widespread occurrence of Eastern White Pine in the western mountains and foothills.