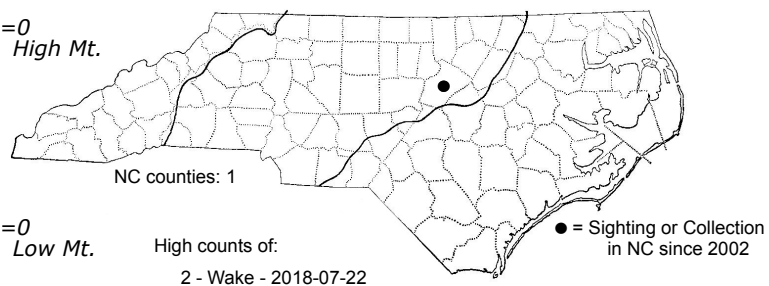
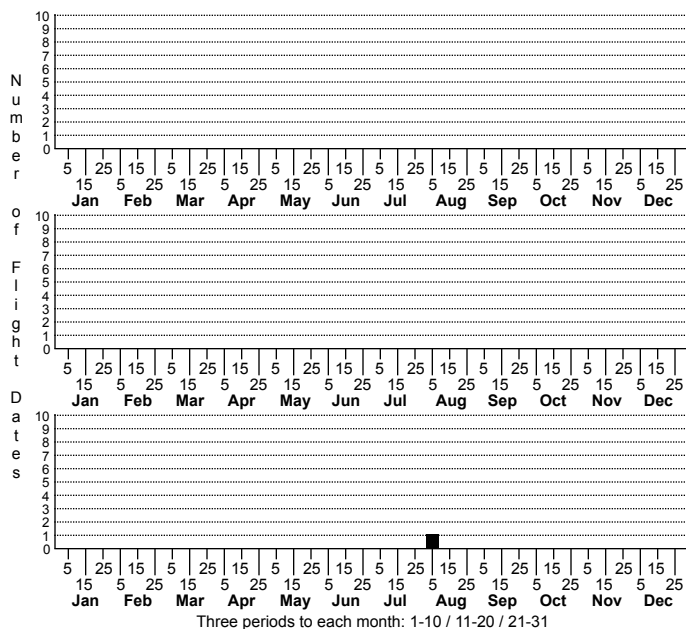
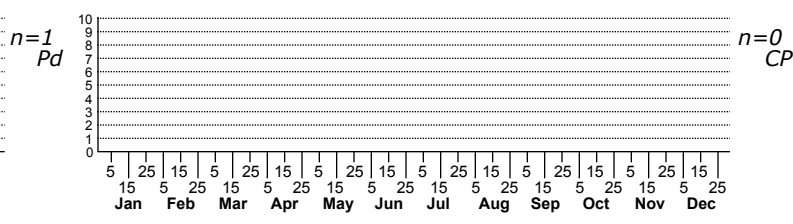


*Mompha annulata* No common name



High counts of:  
 2 - Wake - 2018-07-22  
 1 - Wake - 2018-08-09  
 1 - Wake - 2019-05-16

Status		Rank	
NC	US	NC	Global



FAMILY: Mompidae SUBFAMILY: Momphinae TRIBE:

TAXONOMIC\_COMMENTS: The genus *Mompha* consists of around 46 described species in North America. In addition, numerous species remain to be described that are centered in the southwestern US (Bruzese et al., 2019). The adults are small moths that have two or more tufts of raised scales on each forewing. The larvae either mine leaves, or bore into the stems, flower buds, flowers, or fruits of their hosts. The majority of species feed on members of the Onagraceae, but others feed on species in the Cistaceae, Lythraceae, Melastomataceae, and Rubiaceae.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS: BugGuide; MPG

TECHNICAL DESCRIPTION, ADULTS: Braun, 1923

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Braun (1923) described *Mompha annulata* based on two specimens that she collected in Ohio. The following is based on her description. The labial palp is silvery white inwardly and fuscous outwardly, with two black rings around the third segment. The antenna is fuscous above in the basal half and black in the outer half, with the tip white. Before the tip, there are five white segments that are separated each from the next by two black segments. The face is silvery, but shades darker on the head, which varies from gray metallic to almost black. The thorax and forewing are black. An oblique silvery bar at the basal fourth reaches the fold. Just beyond and a little below the fold there is a patch of black raised scales. At the apical third there is a slightly inwardly oblique silvery fascia, with the scales near the dorsal margin forming a raised patch. A line of silvery scales is present from just before the tip of wing around the apex to the tornus. There are two parallel rows of black-tipped scales in the cilia, and the hindwing and cilia are gray. The legs are black, with the tips of the segments and a median band on the tibia silvery. The abdomen is fuscous above, with the posterior margins of the segments silvery. Terry Harrison (BugGuide) noted that *M. annulata* is similar to *M. argentimaculella* but differs in lacking a yellow patch on the costa of the forewing just basal to the apical scale tuft (a yellow patch is present on *M. argentimaculella*). In addition, the antennal flagellum is prominently ringed with white in *M. annulata* versus being largely dark or entirely black in *M. argentimaculella*.

DISTRIBUTION: *Mompha annulata* is a rarely encountered species that was previously known only from Illinois, Indiana, and Ohio. The population that was recently discovered in Wake County (specimen verified by Terry Harrison) appears to be a major disjunct from the main range of the species.

FLIGHT COMMENT: Very little data is available on the flight season, but records suggest that the adults are active during the late-spring and summer months. An unoccupied mine was found in mid-May and an occupied mine in mid-July.

HABITAT: *Houstonia purpurea* is the only known host species. This species is common in the Piedmont and mountains where it occurs in dry to moist forests, as well as a variety of disturbed habitats such as the edges of roadways and along woodland trails.

FOOD: Larvae have been found feeding on *Houstonia purpurea* in North Carolina. The leaf mines found by Tracy Feldman in 2018 appear to represent the first known host plant record for this species.

OBSERVATION\_METHODS: Attempts should be made to locate leaf mines on *Houstonia purpurea* during the summer months.

NATURAL HERITAGE PROGRAM RANKS: [GNR] SU

STATE PROTECTION:

COMMENTS: *Mompha annulata* appears to be rare in the eastern US based on the scarcity of records on MPG, BugGuide, BAMONA, and BOLD. Although we currently have only one record for North Carolina, more information is needed before we can accurately assess the conservation status of this species within the state.