50 :53 40 High Mt. 30 N 20 u m 10 b е 25 15 5 25 15 5 5 25 15 5 15 25 15 25 15 25 5 5 NC counties: 64 5 Feb 25 15 Sep 5 25 Oct 15 Nov 5 Dec May Mar Apr Jun Aug Jan Jul o f 50 Sighting or Collection =148 40 High counts of: Low Mt. in NC since 2005 F 30 = Not seen since 2005 150 - Alleghany - 1997-09-02 20 100 - Stokes - 1996-06-18 10 Rank g h Status 100 - Stokes - 1997-07-08 NC US NC Global t 25 15 25 15 5 25 25 25 D Jan Feb Mar May Jun Jul Aug Sep Oct Nov Dec Apr а 50 =327_40 n = 49140 e Pd CP 30 30 s 20 20 10 10 25 15 5 25 15 5 25 5 25 15 5 25 25 Feb Mar Dec Sep Oct Nov Jan Apr Jan Dec Three periods to each month: 1-10 / 11-20 / 21-31

Eupithecia miserulata Common Eupithecia

FAMILY: Geometridae SUBFAMILY: Larentiinae TRIBE: Eupitheciini TAXONOMIC_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1948); McDunnough (1949) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The ground color is dull grayish brown; but North Carolina specimens are often shaded with green -particularly in winter specimens (not mentioned by either Forbes, McDunnough, or Rindge). The discal spot is contrastingly dark but the antemedian and postmedian lines are more obscurely marked. The subterminal line consists of a series of white spots -often chevron-shaped -- with one located at the tornus usually larger and more conspicuous. The first segment of the abdomen is paler than the rest (McDunnough, 1949) and the second segment usually has a faint, dark, transverse band (Bolte, 1990). Females in our populations have dark scaling on the basal half of the abdomen (Sullivan, pers. obs.). According to Bolte, the combination of the prominent dark discal spot, series of white spots or streaks forming the subterminal line, and the prominent white spot above the tornus are sufficient to distinguish this species from the other members of this genus, including misturata, which is otherwise very similar in appearance.

DISTRIBUTION: Probably occurs statewide, and in a wide range of habitats.

FLIGHT COMMENT: Rindge (1985) mentions that miserulata is the only species in this genus that flies year-round

HABITAT: We have records from a very wide variety of open and forested, dry and wet forests. Many records come from residential areas.

FOOD: Larvae are highly polyphagous, feeding on flowers but also a variety of woody trees and shrubs. Wagner et al. (2001) specifically list American Yarrow (<i>Achillea gracilis</i>), asters, fleabanes (<i>Erigeron</i>), joe-pye-weeds (<i>Eutrochium</i>), holly (<i>Ilex</i>), Common Ninebark (<i>Physocarpus opulifolius</i>), oak (<i>Quercus</i>), Black-eyed Susan (<i>Rudbeckia hirta</i>), willow (<i>Salix</i>), <i>Viburnum</i>, and grape (<i>Vitis</i>). In North Carolina, larvae have been recorded on Blue Mistflower (<i>Conoclinium coelestinum</i>), Possumhaw Viburnum (<i>Viburnum nudum</i>), Common Dandelion (<i>Taraxacum officinale</i>), Japanese Honeysuckle (<i>Lonicera japonica</i>), Yaupon Holly (<i>Ilex vomitoria</i>), Maryland Golden-aster (<i>Chrysopsis mariana</i>), a passionflower (<i>Passiflora</i>), and a fleabane (<i>Erigeron</i>), sp.).

OBSERVATION_METHODS:

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S5]

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

COMMENTS: