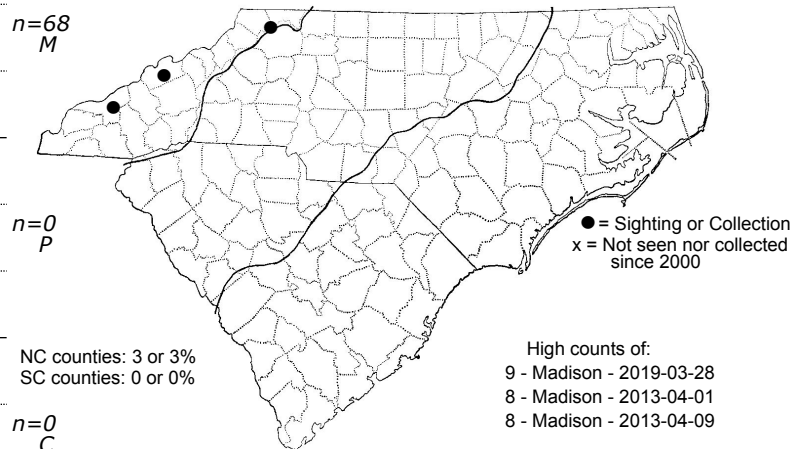
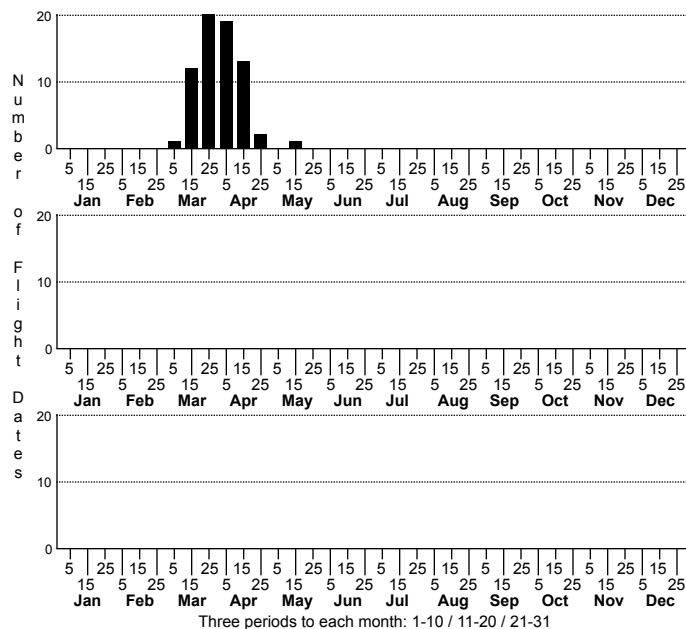


# Olympia Marble *Euchloe olympia*



Earliest date: Madison 7 Mar 2023  
Latest date: Swain 15 May 2001

**Status and Rank**  
State: SR - S1  
Global: G5

**DISTRIBUTION:** Known from just three-four sites in the Mountains (Madison, Swain, and Wilkes counties). This is a more northerly species ranging south to the mountains of VA and eastern TN. In 2011, a resident colony was discovered in Madison County, for a range extension southeastward. The Swain County record, in 2001, represented a major range extension, if resident; however, some believe that this record might have been of a wind-blown stray. However, a 2009 observation, by an excellent biologist, of one just over the state line near Gatlinburg, TN, further gives an indication that there may also be resident populations in the Swain County area. A small population was discovered in Wilkes County, very close to the Blue Ridge Parkway, in 2014, to fill a big gap in the range. In 2022, an observer photographed one at a site a few miles east of the main Madison County population.

**ABUNDANCE:** Very rare, and quite local, in NC; known from just three to four sites (and nearly all records from just one). Even within its main range, it is very local and generally uncommon, typically found in very widely spaced colonies.

**FLIGHT PERIOD:** The species has a single flight in the spring. In the East, it typically flies in April and May. In NC, it flies from mid-March to late April (and to mid-May at high elevations), though in Madison County it can be difficult to find after April 15 in warm spring seasons. The Gatlinburg, TN, record (by Jeff Glassberg) was on April 24, 2009. Note that the flight period keeps advancing (earlier), and in some recent years the flight starts by March 10 and butterflies can be on the wing for only about three weeks at any given site.

**HABITAT:** Throughout its range, the Olympia Marble tends to occur in high pH soil barren areas, such as limestone glades. It also is found in more acidic areas, such as shale barrens; this seems to be the favored habitat in WV (Allen 1997). The habitats are typically open woods or small openings within woods, in uplands, often on low mountaintops and ridges. This is the general habitat at the primary site in Madison County (somewhat dry wooded slope, with rather unusual rock and soil types).

**FOOD AND NECTAR PLANTS:** The foodplants are strictly in the mustard family (Brassicaceae), and are generally the rock cresses in the genus *Arabis*. Most *Arabis* species in NC grow in high pH soils of rich or rocky woodlands, such as over amphibolite rock. Some *Cardamine* species may also be used. Various spring-blooming flowers such as violets are used for nectaring, in addition to several of the foodplant species.

**COMMENTS:** The most significant butterfly discovery in the state in 2011 was the finding of a colony in Madison County on April 17, by Kevin Caldwell and Merrill Lynch. Interestingly, earlier that morning they were on a field trip to an Olympia Marble site in TN, and they used the quick "knowledge" of the habitat there to search in similar-looking habitat in nearby NC! That same afternoon, they were rewarded by observing four individuals. Caldwell returned several days later to catch one, and obtained numerous photos to document the species from that site. Derb Carter, Gail Lankford, and I joined Lynch on April 23 to see the species, finding four also, though there was some wear on them. In 2012, observers checked this site often, finding it on four dates, all in April; and there were three sightings in 2013, when the state's highest one-day counts were made. That count (8) was topped by 9 seen in spring 2019, in late March at that; a new early date was established in 2019 as well -- March 15. David Campbell observed three adults on April 2, 2014 in Wilkes County. The first state record was of one collected by accident in 2001 during a moth-trapping project (Swain County).

This species has a fast direct flight, and males are often seen in constant flight back and forth or through openings, patrolling their territories or searching for females. Thus, the species can be hard to identify and photograph, unless you are patient or lucky to have one stop. At the primary Madison County site, it was difficult if not impossible to separate this species in flight from female Falcate Orangetips, and West Virginia Whites were also present to add confusion.