



# Utah Bug Club



## *Phyciodes mylitta mylitta* (thistle crescent)

**Family:** Nymphalidae

**Discussion:** The thistle crescent has two broods in the lower canyons of the Wasatch Front and up to three broods in the valley floor where it flies in association with alfalfa fields, disturbed habitat, or wet meadows in association with its larval hostplant *Cirsium vulgare* (bull thistle) and *Cirsium arvense* (canada thistle).

**Suitable Lab Host:** Although larvae have been found on bull thistle and canada thistle, there may be other thistles that will be suitable in the lab.

**Effective strategy to obtain immatures:** Obtain ova from live female(s). Also, larvae can be found in wet meadows habitat by carefully checking thistle leaves for the unique larval skeletonizing damage pattern specific to *Phyciodes mylitta* (or montane *Phyciodes pallida*) – see Figure 3.

**Method of oviposition:** Place live female(s) in portable cage – see Figure 1. Expose cage to filtered sunlight for a few hours a day and look for egg masses. OR, place cuttings of thistle in bottled water and cover with sleeve or paint strainer; allowing females to wander around and oviposit on the underside of leaves when ready. Keep females fed regularly and in the dark to rest when not setup to oviposit.

**Method of rearing:** Use an open terrarium or open bucket method with a lid allowing for suitable airflow. Place first instar larvae on large, leaves that are on plant in bottled water – see figure 2. Larvae are gregarious and will feed together until older. Expose larvae to 24 hours of light at all instars. This will encourage them to avoid any hibernation and continue feeding through to pupa; and then adult. **Caution:** Females oviposit in masse and larval consumption will grow exponentially as they get older. Plan on obtaining lab hostplant in growing quantity if you plan to raise a larger number of larvae.

**Method of overwintering:** Half-way grown larvae hibernate. Diapause can be avoided in the lab by exposing larvae to 24 hours of light. If larvae do diapause, overwinter in squat tub (with punctured holes) with leaves where humidity, protection, and airflow is provided.



setup with sleeved females on thistles can be productive.



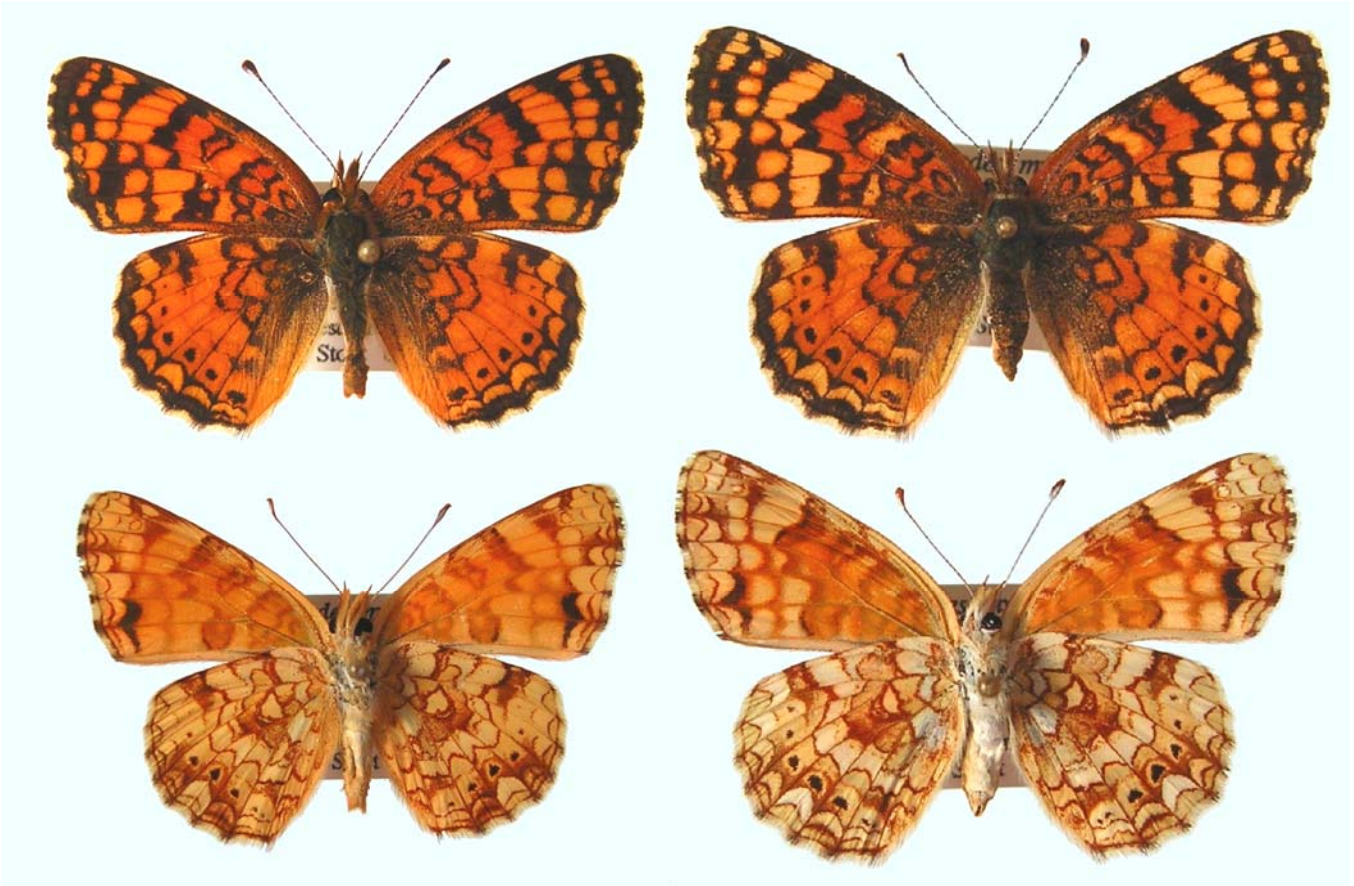
Although ideal setup for first and second instars, this method becomes problematic as larvae grow older.



**Figures 3 (above) and 5 (below):** Finding larvae of *Phyciodes mylitta* in the field is possible by recognizing their unique damage pattern on thistles. In the field, larvae usually rest on the ventral side of the leaf.



**Figure 4:** Because larvae of *Phyciodes mylitta* fall off the plant with the slightest disturbance, an open terrarium method similar to this is recommended without bottling the host so that larvae easily crawl back onto the plant. The 2-3" diameter hole in the lid is designed to create enough airflow to allow frass to dry inside the bucket; while, at the same time, is small enough to allow bull thistle to remain sufficiently succulent for three to four days before it needs to be replaced.



**Figure 6:** *Phyciodes mylitta mylitta* adult series. Both rows consist of males on the left; females on the right; dorsal above; ventral below.