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NOTE

New records of Noctuiodae (Lepidoptera) in Nova Scotia

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During the summers of 2003–2006, an extensive survey of the biodiversity of Lepidoptera of McGowan Lake, Queens County, Nova Scotia (44º 25' N; 65º 03'W) was undertaken. McGowan Lake is located in south central Nova Scotia, near the northern edge of the Mersey Meadows biophysical landscape district (Davis and Browne 1996). The dominant forest cover consists of white pine (*Pinus strobus* Linnaeus (Pinaceae)), red oak (*Quercus rubra* Linnaeus (Fagaceae)), American beech (*Fagus grandifolia* Ehrhart (Fagaceae)), and maples (*Acer* spp. (Aceraceae)).

A variety of collecting methods have been employed at McGowan Lake, including active aerial netting for diurnal species and ultra-violet lights and banana/fruit bait for nocturnal species. Approximately 8,000 specimens were collected over the course of the survey including many rare species and several new provincial records. On 11 August 2004, a single female specimen of the false underwing, *Allotria elonympha* (Hübner, 1818) (Lepidoptera: Erebidae), was collected at a banana bait lure. Subsequently, on 14 August 2004, a single female specimen of *Melipotis fasciolaris* (Hübner, 1823) (Lepidoptera: Erebidae) was also collected at a banana bait lure. These specimens represent new provincial and Maritime records, and in the case of *Melipotis fasciolaris*, a new record for Canada.

Allotria elonympha (Fig.1a) is a medium-sized moth, with dark grey forewings and a deep yellow hind-wing with an even black border. Superficially, *Allotria elonympha* resembles a small true underwing moth (Lepidoptera: Erebidae: *Catocala*). It can be distinguished from the true underwings by the presence of the black orbicular dot on the forewing and by the lack of a dark inner band on the hind-wing which is usually present in the true underwings. *Allotria elonympha* is a widely distributed species ranging from southern Maine and southern Ontario, south to Florida and west to southern Missouri and Texas (Forbes 1954; Covell 1984). There is a single generation per year with adults on the wing from late June to early August. The larvae have been reared on black gum (*Nyssa sylvatica* Marsh. (Nyssaceae)) (Forbes 1954).

Melipotis fasciolaris (Fig. 1b) is a brown, medium-sized moth. The adults are sexually dimorphic, the male being larger and darker brown, and have a white to yellowish diagonal band in the antemedial area of the forewing. The female is a lighter brown, lacks the band on the forewing, and has most of the basal area entirely yellowish brown. One of the most striking features of *Melipotis fasciolaris*, is the large white basal patch present on the hind-wing. *Melipotis fasciolaris* is a subtropical and tropical species. Richards (1939) gave the range of the species in North America as Florida, Texas, and Arizona. Heppner (2003) gives the range of *Melipotis fasciolaris* as including Florida, the West Indies and Mexico south to Argentina. Brou (2006) listed *Melipotis fasciolaris* as an occasional stray in Louisiana. The larva has been reported as feeding on *Gualacum officinale* Linnaeus (Zygophyllaceae) in Puerto Rico (Zagatti et al. 1995).

The presence of stray Lepidoptera in Nova Scotia is not uncommon. Species such as the pink-spotted hawk moth, *Agrius cingulata* (Fabricius, 1775) (Sphingidae); the bella moth, *Utetheisa ornatrix* (Linnaeus, 1758) (Erebidae: Arctiinae); and, the black witch, *Ascalapha odorata* (Linnaeus, 1758) (Noctuidae) have all been recorded in the province (Ferguson 1954), but do not breed here.

Similarly, Ogden and Goodwin (2005) found the American snout butterfly, *Libytheana carinenta* (Cramer, 1777) (Nymphalidae) on Brier Island, Nova Scotia. Amongst the Coleoptera, Wright (1969) found the large water beetle,

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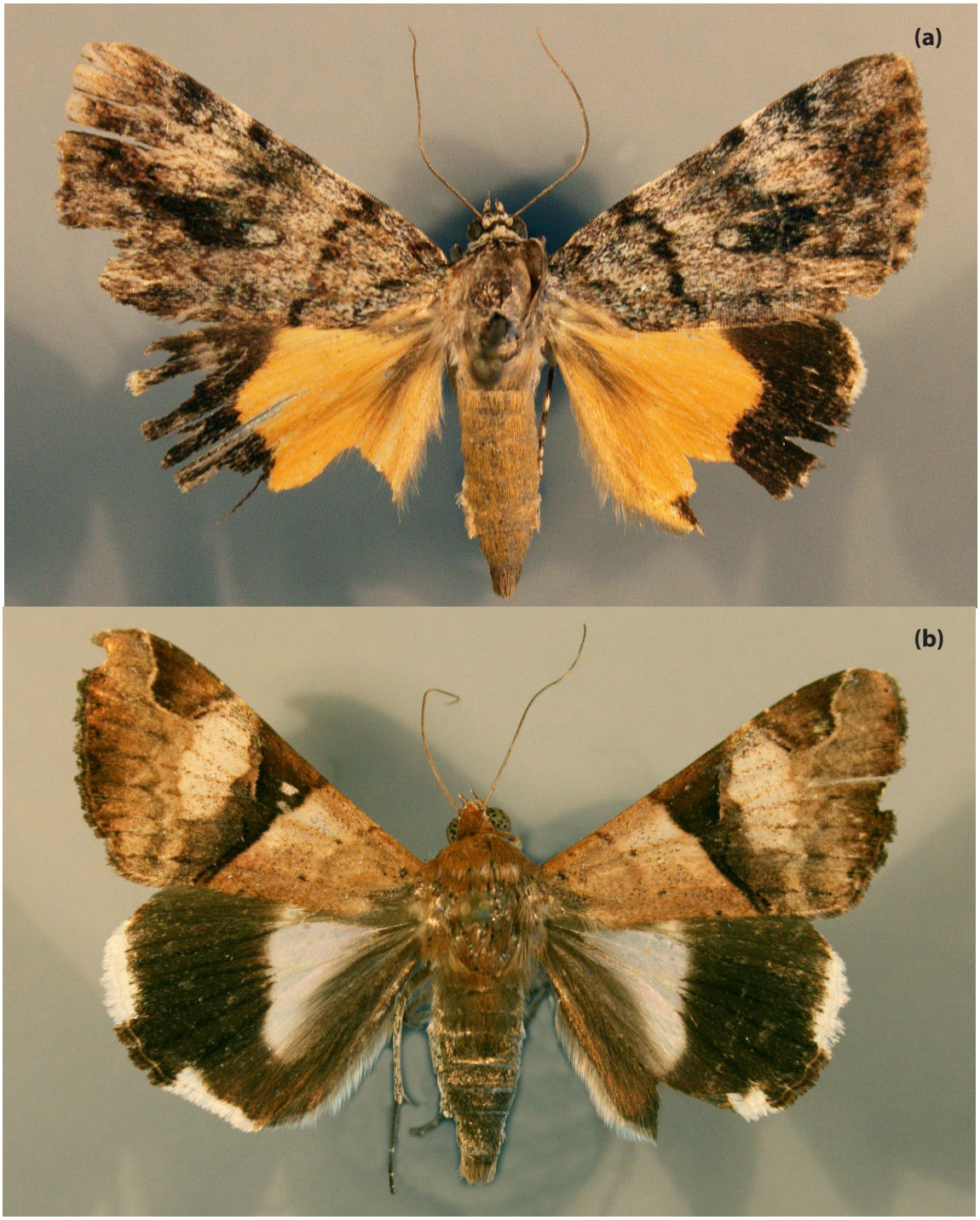
Figure 1. Dorsal habitus photograph of *Allotria elonympha* (Hübner) (a) and *Melipotis fasciolaris* (Hübner) (b). Photo credit: Christopher Majka, Nova Scotia Museum, Halifax, NS.



Hydrophilus triangularis Say 1823 (Hydrophilidae) on Sable Island, Nova Scotia, and Majka et al. (2007) reported the large ground beetle, *Calosoma scrutator* (Fabricius, 1775) (Carabidae) from Cape Sable Island, Nova Scotia. All of these species are extralimital in the province.

Extending as a peninsula into the Atlantic Ocean, Nova Scotia has long been a locality that attracts vagrant Lepidoptera. The continued monitoring of butterflies and

moths holds the promise of detecting additional stray species.

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