Spindle *Euonymus japonicus* Thunb. (Leraut, 2012, *op. cit.*). Being first noted in Europe from Germany in 2007 (Krüger, 2008. *Glyphodes perspectalis* (Walker, 1859) – neu für die Fauna Europas (Lepidoptera: Crambidae). *Entomologische Zeitschrift* **118**: 81–83) it has since spread rapidly to many other European countries, including to mainland Britain in 2008. A useful summary of the spread across Europe and into Britain was provided by Fish & Reeves (2010. *Cydalima perspectalis* (Walker, 1859) (Lep.: Crambidae) in Hertfordshire. *Entomologist's Rec. J. Var.* **122**: 203 – 204).

A known strong flyer, the origin of the Tramore specimen may be immigrant in nature as its capture coincided with a spike in migrant activity. Two Diamond-back Moth *Plutella xylostella* (L.), one Red Admiral *Vanessa atalanta* (L.), three Rusty-dot Pearl *Udea ferrugalis* (Hb.), three Rush Veneer *Nomophila noctuella* (D. & S.) and one Silver Y *Autographa gamma* (L.) were also trapped, additionally, a further 23 Silver Y's were seen nectaring at dusk.

Thanks go to K. G. M. Bond, University College, Cork and J. R. Langmaid, Southsea, Hampshire who kindly confirmed the identity of the moth. The specimen will be lodged with the National Museum of Ireland, Natural History, Dublin.

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***Pieris napi* (L.) (Lep.: Pieridae) mud-puddling in West Perthshire (VC87)**

On 28 May 2017 I observed four individuals of *Pieris napi* drinking from mud churned up by the movement of livestock in a damp grassland (O.S. grid reference NN 561195), adjacent to the river Balvag near Strathyre, West Perthshire (VC 87). The day was very sunny and warm for the time of year, and dozens of *P. napi* and *Anthocharis cardamines* were observed on the wing in the meadows either side of the cycle route leading from Balquhidder to Strathyre. So called "mud-puddling" is a behaviour well documented and widespread among diurnal tropical Lepidoptera (e.g. Beck *et al,* 1999. *Oecologia* **119**:140-148; Molleman *et al.* 2005. *Bio. J. Linnean Soc.* **86**:345-361.) and seems to function as a means of acquiring both fluid and dissolved nutrients. Sodium, in particular, appears to render such a resource particularly attractive, though the attractiveness of a given solution varies across taxonomic families (Beck *et al.* 1999. *Oecologia* **119**:140-148). Contamination of mud by animal waste or other decaying organic matter, and the accompanying chemicals and amino acids, may also influence its attractiveness to Lepidoptera (Shreeve, 1987. *Ent. Rec. J. Var.* **99**:27). It is perhaps significant, therefore, that the field

in which I made this observation contained livestock, though it is equally possible that the hot weather and a need to avoid dehydration may account for the behaviour. While *Pieris napi* has previously been observed mud-puddling in America (Boggs and Jackson, 1991. *Ecol. Entomol.* **16**:123-127; Sculley and Boggs, 1996. *Ecol. Entomol.* **21**:193-197) and Britain (Shreeve, 1987. *Entomologist's. Rec. J. Var.* **99**:27), published records are rare. Unfortunately I could not gain access to the field, but on this occasion many other *P. napi,* in the course of flying about, seemed to be regularly landing on different areas of muddy ground. Although it is impossible to be certain, these individuals may also have been feeding. Such mud-puddling behaviour is perhaps more widespread in temperate climes than hitherto reported.

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Clouded Border *Lomaspilis marginata* (L.) (Lep.: Geometridae) flying as a mated pair

Butterflies are able to fly short distances if disturbed while mating. During many years of transect counts I observed paired flight regularly in Green-veined White *Pieris napi* (L.) (male invariably carrying the female) and Meadow Brown *Maniola jurtina* (L.) (female carrying the male), and in several of the blues Lycaenidae. Yet there is surprisingly little about this habit in the literature, as remarked by Shields, O. & Emmel, J. F. (1973. A Review of Carrying Pair Behavior and Mating Times in Butterflies. *Journal of Research on the Lepidoptera* **12(1**): 45-64). Their paper mainly covers American species. However, I had never observed mate-carrying in paired moths or seen any reference to such behaviour.

Then at 16.00 hours on the warm sunny afternoon of 14 June 2017, while walking through mixed sallow *Salix* carr at Ordiquhill in Banffshire, I brushed against foliage and accidentally disturbed what proved to be a mated pair of Clouded Border *Lomaspilis marginata*. The moths flew for about two metres, losing height, before landing in a low Gorse *Ulex europaeus* bush, where they were conspicuous. My efforts to persuade them to crawl onto a sallow leaf caused them to take flight again. The male, which had the slightly larger wingspan, was the active party, with the female hanging inert below. They landed on the ground about a metre away. This time I successfully managed to transfer them to a sallow sprig, where they remained with occasional minor changes in position. They were still paired when last checked at 21.45 hours.