

Notes on the Scottish Macro-moth List, 2011

This list aims to include every species of macro-moth reliably recorded from Scotland, together with an assessment of its Scottish as opposed to UK status, as guidance for observers contributing to the NMRS. It updates and corrects the original version published in 2009, but should still be regarded as provisional and erring on the side of caution.

At one time or another, virtually every macro-moth on the British list has been reported from Scotland. However, many of these claims are almost certainly misidentifications or clerical errors, including name confusion. A modern complication involves the unwitting transport of non-native species inside the traps of visiting observers; these are then included in the next night's catch. Thus species considered highly improbable or whose origin was suspect have been ignored. They include 19th century records of Speckled Beauty *Fajivorina arenaria* and Waved Black *Parascotia fuliginaria* from Perthshire, plus various unlikely records from the Rothamsted database with no supportive evidence. Old or unconfirmed records that seem more plausible have been relegated to an appendix. It is possible that some of these species will be promoted to the main list when further evidence comes to light.

Assessments of Scottish status have been revised where necessary, following the publication of the NMRS atlas in 2010. Even so, they remain to some extent subjective and provisional. Moreover, the status of our moths is changing rapidly at present, with species expanding northwards in response to climate change. Scotland has gained many new colonists in the last decade, while some resident species have undergone spectacular increases in range.

Geographical terms used in this list are very broad; for instance S means south of the River Tay, while E and W divide the country roughly in two. Note that UK designations such as Na and RDB still apply, though they have not been repeated. Ironically, perhaps the rarest moths in Scotland are not its celebrated Highland specialities but more southern species with just a foothold in the country. Currently, Shuttle-shaped Dart *Agrotis puta* is almost certainly scarcer here than Cousin German *Protolampra sobrina*, for example.

The list and status assessments will be updated regularly as NMRS data increase or clarify our knowledge of Scottish moths. In the meantime, observers are encouraged to point out any errors or omissions and to suggest amendments. Candidate species for admission to the Scottish list should be supported by definite evidence such as a specimen or photograph.

Species added since the 2009 version

In total, 13 species have been added since the original list was published in 2009. Some of these pre-date that list, but the information was not available at the time. They are as follows:

Sharp-angled Peacock *Macaria alternata*: larva, 2008, VC97 – confirming RIS records since 1991.

White-pinion Spotted *Lomographa bimaculata*: omitted from 2009 list in error.

Dingy Footman *Eilema griseola*: VC84, one in 2010 (photo).

Buff Footman *E. depressa*: colonist, first in 2008, spreading rapidly in south.

Water Ermine *Spilosoma urticae*: one on Fair Isle, June 2002, (photos).

Scarlet Tiger *Callimorpha dominula*: one, Barnbarroch VC73, June 1997 (photo); probable adventive.

Banana Stowaway *Antichloris eriphia*: adventives in Shetland (2001) & Banffshire (2009).

Splendid Brocade *Lacanobia splendens*: migrant on Shetland, 2010, det. Jon Clifton.

Obscure Wainscot *Mythimna obsoleta*: resident in VC72 since 2002.

Tawny Pinion *Lithophane semibrunnea*: one in VC72, May 2009 (photo) – potential colonist.

Reed Dagger *Simyra albovenosa*: Shetland, two in July 2008 (photos).

Fen Wainscot *Arenostola phragmitidis*: resident in VC72 since 2003.

Blackneck *Lygephila pastinum*: Berwickshire cliffs, 2009, confirming 1956 records.

Species upgraded from Appendix

Dark Dagger *Acronycta tridens*: two gen. det on Orkney, 1986 & 2006 (unfortunately females).

Copper Underwing *Amphipyra pyramidea*: now various confirmed records.

Species downgraded to Appendix

Oak Lutestring *Cymatophorima diluta*: unverified old records, beyond main range.

Beaded Chestnut *Agrochola lychnidis*: no verified records traced; one now withdrawn.

Small Rufous *Coenobia rufa*: records in *MBGBI* vol. 10, but error suspected.

Vine's Rustic *Hoplodrina ambigua*: a few old records, but misidentification likely.

Species removed since 2009

Barred Hook-tip *Watsonalla cultraria*: no convincing records traced.

Jasione Pug *Eupithecia denotata jasioneata* (gen. det.) specimen clearly female Tawny Speckled Pug.

These changes bring the total of macro-moths (including swifts, burnets etc.) on the main Scottish list to 553, though this includes species that are long extinct in Scotland, as well as rare migrants and adventives. A further 23 species are considered possible but unproven.

Besides new additions, there have been some notable recent sightings. Thanks to pheromone lures, Currant Clearwing *Synanthedon tipuliformis* was found in Roxburghshire in 2010, the first Scottish record since 1998. August Thorn *Ennomos quercinaria* was confirmed in VC73 (photos). Despite several poor summers for migrants, 2010 saw a Silver-striped Hawk-moth *Hippotion celerio* in Kintyre, the first Scottish record for many years. Above all, the NMRS provisional atlas highlighted some spectacular increases in Scottish range over the past decade or so, but little evidence of declines. Who knows what the next few years will bring? In these exciting times, even the most unlikely record cannot be dismissed out of hand, not when Water Ermine can reach Fair Isle and Reed Dagger occur as a migrant on Shetland. It is fortunate that digital cameras and internet forums have revolutionised recording, allowing instant identification and confirmation of such rare finds. Yet caution is still necessary. Black Arches *Lymantria monacha* is surely an unmistakable species, but two Scottish records turned out to be clerical errors, one for Black Rustic and the other for Dark Arches.

Because CMRs were allowed the final say, various species not on this list appear for Scotland in the NMRS atlas. I would be delighted to receive records backed by photographic evidence for Horse Chestnut *Pachycnemia hippocastanaria*, Privet Hawk-moth *Sphinx ligustri*, Wormwood *Cucullia absinthii*, or indeed any other species not on the present Scottish list.

A large number of observers, internet forums and record centres have contributed either directly or indirectly to the creation of this list. Grateful thanks to them all.

Roy Leverton February 2011