the Channel Islands, it was considered desirable to publish the discovery immediately. In the meantime the following brief account is gleaned from Foster and Wohlfart. The adults fly between October and December, during which time ova are laid on holm oak *Quercus ilex*. After overwintering they hatch during April and May. The larvae pupate in September.

Status in the Channel Islands

The few collectors and recorders in Jersey rarely, if ever, use light-traps during the flight period of this species. This suggests the moth may have long been present in the Island but merely overlooked. Moreover, as holm oak is one of the more common trees here it was possible *D. labecula* was also widespread.

During the late autumn and early winter of 1992, unfavourable weather conditions precluded light-trapping. However the mild weather of 1993 led to the discovery of four new sites at widely separated localities across the Island. In 1994 a further two new sites were found, confirming the species to be widespread and not uncommon. To date I have recorded a total of seventeen individuals from six localities. A further two individuals were caught in the Rothamsted Insect Survey light-trap at Trinity on 25. and 29.x.1995. The moth has now been recorded in Guernsey, with singles to light at Pleinmont on 13 and 28 October. A specimen was taken at Les Sages on 21 October with a further four at the same location the following day.

It will be noted from the photograph (Plate D, Figs. 9 & 10) that there are two forms of the moth based on the colour of the reniform stigma. In the specimens I have examined there appears to be no further significant variation.

In the systematic list, this species should be placed between 2243: *Xylocampa areola* Esp. and 2244: *Meganephria bimaculosa* (L.). It is suggested that the number 2243a should apply.

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References

Forster, W. & Wohlfart, T.A., 1963. Die Schmetterlinge Mitteleuropas 4: 197-198. Leraut, P., 1980. Liste Systematique et Synonymique des Lépidoptères de France, Belgique et Corse. Suppl. Alexanor. Paris.

The Large White butterfly Pieris brassicae (L.) (Lep.: Pieridae) in Shetland

The Large White was obviously scarce or rare in Shetland at the end of the last century and the beginning of this. Beirne (1945, *Ent. Rec.* 57: 37-40) could not trace any original records nor find any specimens although he noted that some authors had included Shetland in the species' distribution.

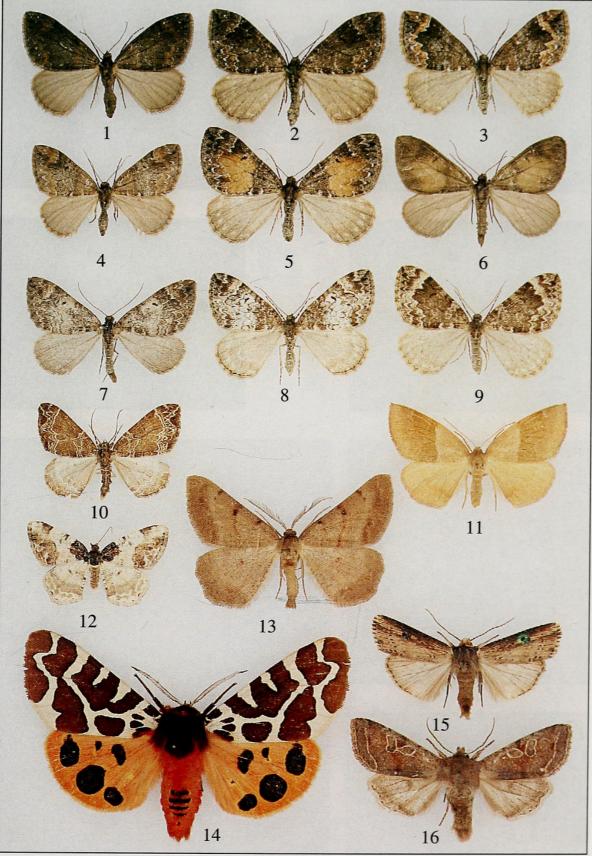
Popular belief is that the species was introduced to Shetland amongst NAAFI cabbage during the last war (Berry and Johnston, 1980. *The Natural History of Shetland*. Collins). The truth of this is hard to establish. Colonisation possibly occurred naturally at about the same time, and the connection with the influx of strangers during the war made later. Certainly, by the early 1960s the species was well-established enough to be considered a pest on many parts of Mainland (Kettlewell and Cadbury, 1963. *Ent. Rec.* **75**: 149-160).

Nowadays the Large White breeds almost throughout the islands. There are breeding records from all inhabited islands except Fetlar (strangely as Fetlar is renowned for its fertility; the name even translates as "Fat Land"). There are only old, undated records of larvae from Fair Isle (Fair Isle Bird Observatory (FIBO)). Foodplants recorded so far in Shetland include only the expected *Brassica* and a common garden plant *Hesperis*. Records clearly establish that the Large White is univoltine in Shetland, as it is in northern Scotland (Leverton, 1994, *Ent. Rec.* 106: 190-191 and M. Young, *pers. comm.*). Locally bred adults fly in Shetland between mid-June and early-August. The species is commonest in South Mainland north to Lerwick where it is possible to see up to 100 in a day in fine weather. Elsewhere, although locally common around certain kaleyards (the local name for what one might call a cabbage patch), one might normally only see single figures in a good day.

The presence of migrants in Shetland can be difficult to establish. Records from areas without a breeding population, such as Fair Isle, Fetlar and Noss, can help. These three areas are systematically covered on an almost daily basis by wardens and visitors. Some records could refer to local wanderers from the Shetland population, although this is unlikely on Fair Isle.

Records from Fair Isle are by no means annual, with records in just eight of the 18 years since recording began there in 1978, with eight in 1988 the most in any one year (FIBO). Although there was an early record on 14.v.1990, most records are in the period mid-June to mid-July when they are commonest on Mainland Shetland. There are only a few records in late July and early August with the latest on 23 August. On Fetlar and Noss a few odd singles have been seen in recent years in June and July. The only series of records, suggesting larger immigrations, involved virtually daily records on Noss from 10-28.vi.1992 and on Fetlar from 4.vi. to 8.vii.1995. These records from the outer islands suggest that any major immigration occurs in June and July, when the migrants would be overlooked amongst locally bred butterflies.

The only migrants which can be certainly recorded from elsewhere in Shetland are those recorded at unusual times of the year – before mid-June and after mid-August. Early spring migrants appear to occur regularly. Since 1990 there have been records of one in 1990 (on Fair Isle as listed above), none in 1991, over 20 in exceptionally fine weather from 19.v.1992, about



Figs. 1 - 8. Aberrations of Chloroclysta truncata (Hufn.) (Geometridae). ab. nigerrimata Fuchs;
ab. perfuscata Haw.;
ab. nigrobrunneata Heyd.;
ab. saturata Steph.;
ab. rufescens Strom;
ab. mixta Prout;
ab. griseofasciata Müll.;
ab. russata Hb.

Figs. 9 - 12; 14 - 16. New aberrations of British Lepidoptera.

9. Chloroclysta truncata (Hufn.) ab. rufofasciata ab. nov., 10. Ecliptopera silaceata D. & S. ab. reticulata ab. nov.; 11. Plagodis pulveraria L. ab. effusa ab. nov.; 12. Ligdia adustata D. & S. ab. nebulata ab. nov.; 14. Arctia caja L. ab. rivularis ab. nov.; 15. Axylia putris L. ab. brunnea Goater; 16. Orthosia incerta Hufn. ab. ocularis ab. nov.

Fig. 13. Selidosema brunnearia Vill. ab. atlantica ab. nov.

All Figs. approximately life size (West, 1996).



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