emerged between the 23rd July and the 8th August; there were only six parasites of two species, now with Dr M.R. Shaw. The small number of emergences may have been due to my having collected the leaves too early.

My third visit was on the 30th September. The pyracantha berries were making a wonderful display and the heavy infestation had clearly done no lasting damage. The mines on the shadier side of the garden included relatively few that were fully formed and many contained dead larvae. On the sunnier side the situation was again different, with plenty of fully developed mines, though fewer than in March. I took 25 from which 12 adults and one parasite emerged between 13th and 28th October. Emergence was also taking place in the wild; R.J. Heckford captured an adult at Grays, Essex on 28th October (D.J.L. Agassiz, pers. comm.).

Although I have said that there are three broods, possibly there is only a single generation in shady situations. Against a sun-baked fence development is more rapid to produce the smaller second and third emergences. There may, however, be no clear demarcation between them.— A.M. EMMET, Labrey Cottage, Victoria Gardens, Saffron Walden, Essex CB11 3AF.

## Dates of emergence of *Abraxas grossulariata* (Linnaeus) (Lep.: Geometridae) in South Cumbria

I was much interested in the recent note by Mr A.A. Allen (Allen, 1989) concerning the seasonal cycle of the Magpie moth (*Abraxas grossulariata*). His note stimulated me to review the records of this species covering a period of 68 years — 1918 - 1987 inclusive — which exist for this district of Cumbria (v.c. 69).

The late Dr R.C. Lowther, who was for many years in medical practice in Grange-over-Sands, kept very detailed records of all his captures and observations on the moths of Grange and its neighbourhood. In the three large volumes of records, which were given to me by Mrs Lowther after her husband's death, there is a page for each species of macrolepidopteron giving details of first annual dates of occurrence in Grange, Arnside, Kendal and other local areas. These records form the basis for the earlier years here considered and cover the period from 1918 to 1949 inclusive.

In 1969 Mr Jerry Briggs moved from Yorkshire and came to live in the very favoured locality of Beetham, near Milnthorpe, Cumbria. Here he operated a mv trap from 1969 until the present time. Records of his captures and observations were kept in very great detail. Unfortunately health problems put a stop to full recording in 1985. Recently his collection and note books have been donated to the Cliffe Castle Museum, Keighley where they are in the charge of Miss Margaret M. Hartley who kindly abstracted relevant records for inclusion in this paper. Between 1950 and 1969 full records of first dates are not available. A few records for this period are included in the data, these provided by the late Rev J. Vine-Hall (Vine-Hall, 1954) and the author.

The following is a summary of 56 observations of first dates for the Magpie moth over a period of 68 years (the number of records is given in brackets):

May (1 only, 29 May 1942; R.C. Lowther); June 1-7 (1); June 8-15 (5); June 16-23 (4); June 24-30 (3); July 1-7 (18) July 8-15 (4) July 16-23 (5); July 24-31 (8); August 1-7 (5); August 8-15 (2).

(I'm afraid our "first date" record does not beat Mr Allen's of 24th May 1989!)

Thus for *this* district, it is clear that the major time of appearance of the Magpie is about the first week of July. It is perhaps of interest to compare by month the records of Dr Lowther (RCL) and Mr Briggs (JB):

	RCL (1918-49)	JB (1969-85)
May	1	0
June	13	0
July	18	10
August	0	6

From these data it would appear that in recent years the date of first appearance is in fact *later* than in earlier times. It is possible that climatic conditions may be an influence as Grange-over-Sands has a reputation for enjoying a mild climate, and for this reason the species may occur earlier than at Beetham which is situated on similar carboniferous limestone and only six miles in a direct line from Grange.

The evidence here presented does not support Mr Allen's interesting hypothesis that the Magpie is emerging at an earlier date than formerly at least so far as north-west England is concerned. It would be interesting to learn if data similar to those here presented are in existence for south-east England. Only if they are, perhaps, can a true assessment of the situation be made.

I am very grateful to Mr Briggs for giving me permission to use his records and to Miss Margaret M. Hartley B.Sc., F.M.A., Keeper of Natural Sciences at Cliffe Castle Museum, Keighley, Yorkshire for abstracting his records lodged in the Museum.

## References

Allen, A.A. (1989) Has Abraxas grossulariata L. (Lep.: Geometridae) been shifting its seasonal cycle? Entomologist's Rec. J. Var. 101: 238.

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## Pyracantha and the Holly Blue.

I can add a little to Mr Plant's observations of *Pyracantha* as a possible foodplant for the larvae of this butterfly (*Ent. Rec.* 102: 41). Holly Blues were everywhere in this neighbourhood last summer and I often saw them "investigating" *Pyracantha* bushes in our garden. On two occasions, last



Pfeiffer, Richard. 1990. "Dates of emergence of Abraxas grossulariata (Linnaeus) (Lep.: Geometridae) in South Cumbria." *The entomologist's record and journal of variation* 102, 144–145.

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