BUTTERFLIES AND MOTHS IN BAKEWELL AND DISTRICT.

By Ernest A. Price.

T HE following notes deal with the various species of butterflies and moths encountered by the writer over a period of approximately seven years in Bakewell and its immediate surroundings.

Some species such as *Megera* (the Wall), *Pamphilious* (the Small Heath), etc., I have not included as being more or less evenly distributed throughout the county. In the case of *Napi* (Green Veined White) there appears to be a consistent yearly variety in Lathkil Dale — confined to one small area only — in which the veining is of a very fine light grey. Elsewhere in the dale the insect conforms to normal.

Lathkil Dale also produces yearly — again in one area only — a race of dwarf *Cardamines* (Orange Tip) in which the wing span of the male approximates to 0.75 ins. Curiously I have not been able to find a real dwarf female, although I have found some much smaller than normal. This dwarf corresponds to the proposed "Hesperides" (vide South's Butterflies of the British Isles) except that the specimens are considerably smaller than those mentioned by South.

My observations show marked variation in incidence from year to year. *Croceus* (Clouded Yellow) was common throughout the country and here in 1947 — more seen in 1948, five in 1949, one or two in 1950 and 1951, but none seen since. *Aglaia* (Dark Green Fritillary) also shows marked fluctuation but so far has never failed to appear in Lathkil Dale, although it has not been noticed on Longstone Edge for two years. The *Vanessa* also fluctuate enormously. Atlanta (Red Admiral) and Cardui (Painted Lady) vary from some sort of profusion to a state of relative rarity from year to year.

C-Album (Comma) has never failed to appear at least once or twice up to 1953 during the autumn either on Ice Plant or Michaelmas Daisy. This year, 1954, however, I have seen only one on May 3rd, obviously a hibernated insect.

Urticae (Small Tortoiseshell) is quite common in and around Bakewell. During the past years I have taken a fine series of ground colour gradations varying from straw to dark brown. Ab. Polaris appears to be met with more frequently in the Bakewell area than I at least have encountered elsewhere. Unusual markings occurred on the fore wings of a specimen caught in Bakewell 21 August 1954 which appeared to be a distorted form of Polaris, and I include it as being uncommon and therefore of some interest. I have caught one Ab. Polaris showing a rudimentary projecting bar but have not seen one so definitely pronounced as this before; most Ab. Polaris show no signs of a bar such as this. It may be that other local entomologists have seen this form before and I have only just been fortunate enough to find it.

Jurtina (Meadow Brown), usually a ubiquitous butterfly, seems strangely enough to be quite rare around Bakewell. I have only seen it in Lathkil Dale where in quite a small area there is a very sparse little colony which appears to be roughly static in numbers from year to year.

The Green Hairstreak (Rubi) appears to be more or less common yearly on the moors around Bakewell irrespective of meteorological conditions, and the White Letter Hairstreak (W. Album) has also appeared during the last year or two in Lathkil Dale, this latter however only late in the season, when it has been found resting on ragwort. This leads me to believe that it may be quite common there (the food plant is), but overlooked earlier in the season owing to the density of the tree population.

A year or two ago the variety of small copper (caeruleopunctata) was actually commoner in gardens in Bakewell than the normal form. As regards the "Blues", the Brown Argus (Agestis) and Common Blue (*Icarus*) are fairly prolific, Lathkil Dale yielding some very fine varieties of the female *Icarus*.

The Skipper family seems to be chiefly represented by the Dingy (*Tages*) and Large Skipper (*Venata*) both of which are common in Lathkil Dale and elsewhere. The Grizzled Skipper (*Malvae*) occurs sporadically in Lathkil Dale and a few other local areas, but in very small numbers.

Two butterflies I have been quite unable to find and which I should rather have expected are *Minimus* (Small Blue) and *Tithonus* (Small Meadow Brown). *Aegeria* (Speckled Wood) has occurred once in Lathkil Dale 28 July 1950 and twice within a stone's throw of my own garden on 18 July 1948. There is a small colony of *Tullia* (discovered in 1942) in a fold in the hills near Matlock. They are still extant although static in numbers. So far as I am aware only one other person is aware of the existence of this Large Heath colony.

Bakewell and district appears to be fairly well endowed in respect of its moth population. I am not including any of the Micro lepidoptera or those which can be encountered almost everywhere. All moths mentioned have been taken naturally, that is, without the aid of sugaring or the use of a moth trap or lamp.

The Hawk Moths are fairly well represented. *Populi* (Poplar Moth), *Porcellus* (Small Elephant Moth), *Elpenor* (Great Elephant Hawk) have been met with in the greatest numbers.

Populi. Fairly common annually, some very fine pink forms were prevalent in 1953. Porcellus was fairly plentiful in 1948/49 but I have not seen it since. Elpenor — plentiful supply of larvae on Willow Herb in 1952, particularly on the premises of the D.P. Battery Company. Ocellatus (Eyed Hawk) only seen four times in as many years, and Stellatarum (Humming Bird Hawk) has only appeared in odd ones and twos except during the great invasion of 1947 when almost every garden had its quota. A very fine female Atropus (Death's Head Hawk) with a wing span of 5.5 ins. was found in the greenhouse of Mr. Oates, The Avenue, Bakewell, in 1949 and is now in my collection.

Although Willow and Poplar are common hereabouts, I have only met two *Vinula* (Puss Moth) in the area, both at the D.P. Battery Works.

Buff, White Ermine and Muslin Moth together with Jacobae (Cinnabar), Fulginosa (Ruby Tiger) and Plantaginis (Wood Tiger) are fairly common. Strangely enough Caja (Garden Tiger) so far as I am concerned appears to be comparatively uncommon. Geryon (Cistus Forester) is quite common in Lathkil Dale and on Longstone Edge. This insect seems to have a marked preference for a particular area and does not seem to wander from this spot although the food plant is available all around.

This year I have seen *Batis* (Peach Blossom) for the first time in this area, also *Dictaeoides* (Lesser Swallow Prominent) and *Bucelpha* (Buff tip).

NOCTUAE. *Perla* (Marbled Beauty) has occurred in ones and twos, but no less than eight were met with in 1954, two of which were of the melanic form. This latter I have hitherto only encountered further south.

Corylii (Nut Tree Tussock), Megacephala (Poplar Grey), Comma (Shoulder Striped Wainscot), Lutosa (Large Wainscot), and Glauca (Glaucous Shears) are also newcomers.

The present year has also yielded some fine melanic specimens of *Polydon* (Dark Arches). *Plecta* (Flame Shouldered) has also been quite common in 1954. *Xerampelini* (Centre Barred Sallow) and *Aurago* (Barred Sallow) have appeared in this area.

Both *Iota* (Plain Golden Y) and *Pulchrina* (Beautiful Golden Y) have been unusually plentiful in 1954.

GEOMETRAE. In spite of the entomologically appalling weather, *Margaritaria* (Light Emerald), *Prodomaria* (Oak Beauty) and *Betularia* (Peppered Moth) — this last in extreme melanic form — have been relatively common this year. I have in fact seen more in 1954 than in the preceding six years.

A newcomer to the district (at least to me) is *Marginata* (Clouded Border); although reputed to be a common moth

I have not seen it in or around Bakewell before. My two specimens were taken July 17th-July 20th. The time of emergence is usually given as late May and June: the lateness may be due to geographical position or the persistent low temperature.

Another moth which has appeared in unusually large numbers and exhibited a range of very heavily marked insects is *Pyraliata* (Barred Straw).

Of the carpets only three are worth mentioning, Bipunctaria (Chalk Carpet) — fairly common in Lathkil Dale — Rivata (Wood Carpet) — Coombes Dales with a series of very beautiful gradations in markings — and Propugnata (Flame Carpet). This last-named is also a newcomer to the neighbourhood as far as I am concerned.

Tiliaria (Canary Shouldered Thorn) was met with four times in 1952 but has not been seen since.

Other moths that have appeared in this area in unusual numbers this year are:

Certata (Scarce Tissue). Prunata (The Phoenix). Testata (The Chevron). Centaureata (Lime Speck Pug). Subfulvata (Tawny Speckled Pug). Ulmata (Clouded Magpie). Wauaria (V. Moth). Temperata (Clouded Silver). Papilionaria (Large Emerald).

1954 NOTES.

From Poplar Hawk eggs obtained from poplar in Bakewell and hatched June 28th, the larvae had fed up and pupated August 12th. This is the earliest pupation of the moth I have known. Whether this presages a double brood of *Populi*, or an abnormally long pupation remains to be seen. In 1953 the marked pink form of *Populi* was fairly plentiful, yet in 1954 although I have seen many examples of the Poplar Hawk no pink forms were observed. In fact with the exception of *Populi* which seems to have been as common as usual, 1954 has produced no Hawk moths at all in this area.

BAKEWELL BUTTERFLIES AND MOTHS

Bilineata (Yellow Shell): some very beautiful darkly marked insects were obtained from Longstone Edge, very similar to the Scottish form. Previously I had not seen any remotely approaching these in intensity of marking, although obtained from precisely the same area.

Chi (Grey Chi): this moth seems to haunt a particular area of Bakewell where it is noticeably common this year.

As a final feature of interest, *Mendica* (Muslin moth) has been very common in gardens in Bakewell itself this year. Both male and female have been fairly equally represented in numbers.