

tible to trapping, or casual invaders. Traps using the more effective ultra violet fluorescent lamps instead of the 100-watt incandescents used during the designated decade might have shed some light on the issue, but would have made it necessary to examine about three times as many specimens, not to mention a greatly increased bulk of "junk" insects.

The order in which the species succeed each other in their first appearances at the trap, from the beginning to the end of the season, is a separate subject. It will merely be noted here that among the first are *Lithophane thaxteri* Grt. and *Litholomia napaea* Morr. They are also among the last to appear in the fall, and therefore may be considered to winter in the moth stage.* Most other species in Saskatchewan have a diapause in the egg, larval or pupal stage, and hibernate in one of those.

Mr. C.G. Devlin, Technician, using the skills in the taxonomy of the Noctuidae

* These species are in the subfamily Cucullinae. A number of other species in the same subfamily overwinter as adults in Saskatchewan, especially those in the following genera: *Lithophane*, *Eupsilia*, *Xylena* and *Homoglaea*. These can be collected as adults in both October and April. The provincial total for noctuid species now stands at 523. — R. Hooper

VARIEGATED FRITILLARY BREEDING AT THE PAS, MANITOBA

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There are only two species known in the genus *Euptoieta* — *E. hegesia* and *E. claudia*. The first is a jungle butterfly ranging into the United States. The second, the Variegated Fritillary, also originates in the new world tropics but migrates across the

acquired first under the direction of Dr. H. McDonald, played an essential role in the identification of material captured at Aylsham. It is a pleasure to acknowledge his contribution. Resort was regularly had to the reference collection of Noctuidae available at the Agriculture Canada Research Station at Saskatoon, where both the author and Devlin were employed when the work described was under way.

- ¹ GUPPY, J.C. 1961. Life history and behaviour of the armyworm *Pseudaletia unipuncta* (Haw.) (Lepidoptera: Noctuidae) in Eastern Ontario. The Canadian Entomologist 93:1141-1153.
- ² KING, K.M. 1940. The light trap as an indicator of population trends in Noctuidae. Ph. D. Thesis, University of Minnesota (Unpublished).
- ³ PUTNAM, L.G., and L. BURGESS. 1979. Insect pests of rape and mustard. *In*: Insect pests and diseases of rape and mustard. Rapeseed Association of Canada Publ. No. 48.

whole of the United States and most of Canada to reach The Pas in late June or early July. These are rare visits. Several years go by without one being seen. These migrants are small, worn examples which can be seen on the wing for a few weeks. They feed at dandelion blossoms.

Now and then a few specimens can be netted in The Pas area of a locally produced generation — originating from the eggs laid by the southern visitors. These are large dark specimens often remarkably mottled on the underside. Such specimens

are rare and tend to appear after any heat waves we may have past the middle of July.

Last summer I found a strange caterpillar on garden pansies. There was only the one and it was late in the season. It was a surprise to see how many pansies one caterpillar could eat! It continued to feed in the garden until 15 August when it was brought indoors because a severe frost was expected that night. It completed feeding and pupated inside a shoe box in the greenhouse. It finally emerged 22 September 1984 and is a good specimen apart from the right forewing being a bit aborted. The specimen with its pupal case is in the author's collection.

This caterpillar would not likely have survived the killing frosts of the season at The Pas. This is a case of frost eliminating

a species that is out of its normal range. This specimen is the progeny of late egg laying on the part of the female, or due to the lateness of the season. It was a surprise that only this one caterpillar was found in that very hot and dry summer of 1984.

The migrating adults were seen in record numbers (two or three per day on town streets) in June and July 1984 at The Pas. The same individuals may have been counted on different days. It was hoped that there would be a local flight of the species but only one large adult was seen in late summer.

There doesn't seem to be any evidence that the fresh adults go south, as do Manitoba-grown Monarch Butterflies. They are born only to be killed by the first autumn frosts. This is a strange waste on Nature's part!



Tiger Moth larva

F.A. Switzer