

INSECTS IN HAMPSHIRE, 1941.

By F. H. HAINES.

THE year opened with a cold January : lacking sun, and with little wind, but that always N.E. The first two weeks were dry, the last part wetter. The occasional snow was not heavy, but the many cold nights often showed 20 degrees of frost in the earlier weeks. (Rainfall 3.75ins.) February was somewhat cold, windy and dull. The earlier half dry, the later weeks were wetter. Sunny spells occurred. A little snow fell, with few very severe frosts. (Rainfall 3.38ins.) In March the weather was cold and dull, with N.E. wind, and several rather severe frosty nights. (Rainfall 3.26ins.) A cold, grey April had much N.E. wind and little sun. The rainfall rather heavy at first, but succeeded by a drought, with no typical April days. (Rainfall 3.48ins.) The beginning of May resembled April, the N.E. wind sometimes high, and nights frosty. The last quarter became very genial : rainy with pleasant, sunny spring days. (Rainfall 1.62ins.) June was, almost throughout, a hot, fine and sunny month. There was rain at first, and an occasional cold night : 2 degrees of frost on night of 12th ; mostly calm, excepting one gale in mid-month. (Rainfall 1.41ins.) The early part of July was very sunny and hot, later more unsettled and thundery, yet the temperature was high, day and night, with little wind. (Rainfall 2.61ins.) August was cold, dull and windy : few genial days and much rain. (Rainfall 3.57ins.) September was warm, dry and calm : at first rather dull, pleasant sunny days succeeding. (Rainfall 1.33ins.) October was dry with a fair amount of sun, and earlier warm and quiet, later very cold, with N. and N.W. gales towards the end. (Rainfall 1.0ins.) A rather cool, dark, sunless November, often with N. and E. tendency in the wind, no severe frosts, rather light rainfall and one or two gales. Rainfall (2.48ins.) was succeeded by a somewhat dull and foggy December, lacking sun : usually calm with moderate temperature, and one or two nights with 13 and 14 degrees of frost. (Rainfall 1.76ins.) The total rainfall for the year was light here, 29.64ins., the average being about 35ins. Certain thundery conditions in July have been suggested as the cause of an extraordinary number of marked aberrational and varietal forms shown in the Forest butterflies. C.M. considered it a good season for Butterflies and Dragonflies, but found *Hemiptera* and *Coleoptera* scarce. Our Rhododendrons, though well out in June, were singularly unfrequented by hive bees or other insects, perhaps partly because it was then a bad year for certain Orders, and the want of rain made a shortage of honey. Generally, the year was at first poor, at the end good. *Heliothis peltigera* Schiff. was a notable migrant.

Orthoptera (Earwigs, Cockroaches, Crickets and Grasshoppers). (CDD), Dorchester, sent me specimens of the cockroach *Blatella germanica* L. (the "Shiner") which was swarming in a local canteen. It is a naturalized alien, found in woods in eastern Europe, now becoming cosmopolitan under cover. On 13th July, *Ectobia lapponica* L. flew in to light. On 21st June in New Forest several species of grasshopper were approaching maturity, and on 22nd *Omocestus viridulus* L. and *Chorthippus bicolor* Charp. were adult. On 24th July *Mecostethus grossus* L. was mature near Ober Water, and on 27th a very young nymph of *Leptophyes punctatissima* Bosc. was seen. On 12th Sept. *Stenobothrus bicolor* Charp. swarmed in the garden, and continued far into October, while on 15th Oct. *Metrioptera brachyptera* L. was still very plentiful on swampy ground. On 19th *S. bicolor* was still about and *Gomphocerus maculatus* Thunb. was not quite over. On 21st, a rather late date, *O. viridulus* was active in some numbers. (LBH) found *Locusta viridissima* L. on his fence on 19th Aug. He put it in a glass case, and it attacked and ate a 2in. long larva which was about to pupate.

Psocoptera (Leaf-lice and Book-lice). *Caecilius fuscopterus* Latr. was seen here on 27th July.

Ephemeroptera (Mayflies). *Ephemera danica* Müll. was "up" at Hern on 26th May, and very many on 1st June (FCF).

Odonata (Dragonflies). *Pyrrosoma nymphula* Sulz. was seen at Bournemouth on 19th May (FCF). Here there was a great "hatch" in the pond on 29th May, and a few at Hern on 1st June (FCF). *Libellula depressa* L. was seen at Hern on 1st June (FCF), and on our nearly dry pond on 21st and many on the 28th. *Calopteryx virgo* L. was out here on 6th June, and it and *P. nymphula* were in great numbers everywhere here on 8th, abnormally swarming on 15th and 16th and continued for long. *Orthetrum caerulescens* F. was noted here on 15th and common on the 21st, when *Cordulegaster annulatus* Latr. was noted, becoming numerous on Dockens on 27th. (FCF) found no *Oxygastra curtisi* Dale at Hern, but *Gomphus vulgatissimus* L. both at Hern and Oberwater, with many empty nymph cases. *C. annulatus* was at Hern and in New Forest on 15th, but soon after *O. curtisi* appeared at Hern and was in some numbers, all females, save one, on 29th. On July 20th (FCF) reported *Sympetrum fonscolombii* in numbers in the Bournemouth neighbourhood, continuing past 10th Aug., and *Libellula fulva* Müll. still out at Hern, but *O. curtisi* over. On 24th July I was too late for *Ischnura pumilio* Scharp. on its bog, and there was a great dearth of the small dragonflies. *I. pumilio*'s great fluctuation in numbers might lend support to W. J. Lucas' suggestion of immigrant swarms were its appearance not always in the same localities with no fresh colonies to be noted. As the bog had been burnt over there was doubtless some change of terrain, as with *O. curtisi*, to a locality where pabulum had not been diminished and the conditions were normal. A few *Coenagrion mercuriale* Charp. were present, but, with the *Pyrrosomas* and others, were almost absent. Great numbers of *O. caerulescens* F. were present, especially males, and on Ober Water were numerous *C. annulatus* and *C. virgo*. *Sympetrum scoticum* Don. was emerging on the swamps. *S. flaveolum* L. was almost certainly seen near Burley New Enclosure, a rare immigrant species. *Aeschna juncea* L. was noted here on 18th Aug., and *Ae. cyanea* Müll. on 24th, both species on 2nd Sept., and the former on 4th. (FCF) reported on 7th many *Odonata* near Bournemouth: the two *Aeschnas*, *S. striolatum*, and late specimens of others, including specimens of *Coenagrion puella* L. and *Enallagma cyathigerum* Charp. and *S. scoticum* which lasted past 21st Sept. *S. striolatum* was about on 31st Oct. and 9th Nov. (FCF) has an exhaustive paper on *Ischnura pumilio* Charp. in *Journal of Society for British Entomology*, 12th Nov., 1941, p. 115, in which he says: "A good deal has been written about the 'red' or 'orange' varieties of the females of *pumilio* and *elegans*, but, as a matter of fact, it is these same pale-coloured specimens which are the types, and the so-called 'heteromorphs.' The darkly marked specimens which simulate the males more or less closely

are the real varieties or 'andromorpha.' Throughout this large genus we find the orange females, and it is beyond the bounds of coincidence that the same variety should have evolved in every species. The teneral males, on first emergence, are coloured similarly, so that it is evident that the orange-coloured females represent the primitive state." The orange colour is basic.

In *The Entomologist*, Aug. 1941, p. 187, five or six *S. fonscolombii* are reported from Hawley Lake, 2nd July. Two males and one female were taken, fairly mature but with pterostigma yellow. In this Magazine for Nov., p. 264 (FCF) reports a number of *L. depressa* in the Bournemouth neighbourhood, and suggests an immigration.

Hemiptera : Heteroptera (Bugs). *Dichroscytus rufipennis* Fall. was found here on 20th July; *Capsus lamarius* L. on 19th.; *Peritrechus geniculatus* Hahn. on 7th Sept.; *Aelia acuminata* L. 7th Sept., very immature nymph; *Cymus melanocéphalis* Fieb. on 15th June amongst many others.

Homoptera (Frog-hoppers, Cuckoo-spits, Plant-lice and Scale-insects). (FCF) states that his laurels were again attacked by an aphid in Bournemouth. In *E.M.M.*, Feb., 1941, p. 41, the history of the New Forest Cicada, *Cicada montana* Scop., is exhaustively dealt with by (CM).

Mecoptera (Scorpion-flies). *Panorpa germanica* L. was seen here on 8th June, and *P. communis* was also as common as usual throughout the season. A search for *Boreus hiemalis* L., larvae or pupae, was suggested in Oct., in likely places, by (FCF), to add the species to the Hampshire list. It was unsuccessful. (FCF) had found on 26th Sept., in Kent, some larvae and pupae, and some cocoons of its parasite, *Dyscoletes lancifer* Hal., one of which disclosed the imago, kindly given to me. The larvae live under moss on which they feed in certain counties. The insect is rather curiously local. The imago appears from October to March, and has been found on snow.

Neuroptera (Alder-flies, Snake-flies, Brown and Green Lacewings). On 4th April, *Chrysopa carnea*, f. *carnea*, was normally active indoors, not merely roused by unnatural warmth, and (FCF) had seen *Hemerobius humulinus* L., *Boriomyia subnebulosa* Steph. and this species in Bournemouth. On 23rd, one *H. stigma* Steph. was found here, and on 27th many. At Bournemouth they had been out for some time. *Eumicromus paganus* L. was found here on 1st June. *Sialis lutaria* L. already noted in Bournemouth, was out here and at Hurn also on 1st. *Chrysopa ciliata* Wesm. was very common, and, as usual, *C. ventralis* Curt. *C. perla* L. was abundant, and specimens of *C. vittata* not uncommon on 15th June, when (FCF) took *E. paganus* at Bournemouth. *S. fuliginosa* Pict., as well as *lutaria* L., were on Dockens. A teneral *Nothochrysa capitata* F. was beaten out of a large oak here on 29th by (FCF). *Osmylus fulvicephalus* Scop. was fluttering on Dockens, at evening, on 2nd July. (FCF) noted *Micromus variegatus* F. and *Wesmaelius concinnus* Steph. near Bournemouth on 12th. On 10th Aug., *E. angulatus* St. was noticed, and on 24th again, on birch. *C. carnea* was common in and outside the house on 27th Sept., but had not changed hue. On 9th of Nov. to the end of the year it was much on the stir indoors. On 29th, a teneral specimen was seen without winter colour change, but was dead next day, when one was found at light at evening with winter colouring. The species was especially common in December. Coniopterids were flying in the garden on 20th and other dates in December.

Trichoptera (Caddis-flies). *Stenophylax permistus* M'Lach. was seen on 30th May in heather, ? after hibernation. On 1st June, *Sericostoma personatum* Spence and *Silo nigricornis* Pict. were found here and at Hurn (FCF). The former, *Limnophilus centralis* Curt., and others were very common here on 15th June. *L. luridus* Curt. was seen at Hurn on 27th July, as were *Leptocerus cinereus* Curt. and *Oecetis testacea* Curt.

Lepidoptera (Butterflies and Moths). *Borkhausenia pseudospiretella* Staint. came to light on the evening of the 18th Jan., and one was seen again on the evening of 6th Feb., evidently hibernating, which is often unusual. One was at light on 24th Feb. *Vanessa atalanta* L., much worn, was seen here on 2nd March (FCF). Many *Gonepteryx rhamni* L., of both sexes, were flying on 14th, and *Vanessa c-album* L. on 25th. *V. io* L. was moving in the house on 1st April. *Hydriomena badiata* Hb. was seen in the house on 5th. Many groups of *Melitaea aurinia* Rott. larvae were found on 5th, very numerous and still crowded together: out of their webs, but not separated for pupation yet. They were of various sizes, some almost full grown, others looked as though they had not been feeding again for long. On 21st they were mostly separated and well distributed over the ground. *Pieris rapae* L. was noted on 12th and a fresh *V. c-album* was apparently disturbed from hibernation in a small wood-stack that was being moved. A *V. urticae* woke up indoors on 13th April. The sunny 17th brought out many *Vanessas*, and *c-album* was numerous. *Orneodes hexadactyla* L. was out of hibernation on a window. On 23rd *Hydriomena dubitata* L. was in the house after hibernation. *Pararge aegeria* L. was seen in garden, and on 3rd and 4th May *Euchloe cardamines* L. was reported (FCF). A female was here on the 16th and a male on 21st. *Lycaena argiolus* L. was noted here on 17th, and *Hesperia malvae* L. at Bournemouth on 18th (FCF). *Adela viridella* Scop. was out on 27th and *H. tages* L. on 29th, when the only example of the May brood of *Pararge megaera* L., to date, was seen. *P. napi* L. was about. *H. malvae* appeared here on 1st June, as did *Tyria jacobaeae* L., a male *M. aurinia* and more *P. megaera* with *Falcaria lacertinaria* L. The larvae of *Biston betularia* L., taken here, still produce melanic moths. *Pseudopanthera macularia* L. was out, and males of *Eriogaster rubi* L. in some numbers were dashing about in the afternoon sun on 6th. *Coenonympha pamphilus* L. was plentiful on 8th, and though late, it was evidently a good year again for *P. megaera*. A 'stung' larva of *Hadena meticulosa* L. found on 7th April, with one puncture clearly marked, pupated normally, and on 14th June produced a perfect, if rather small, moth. Presumably the introduced egg or larva died or host vitality prevailed. The frequency of these chances is an interesting speculation. On 15th *Hemaris fuciformis* L. was over rhododendrons and *Thecla rubi* L. was flying as were many *M. aurinia*. (FCF) took *Leuco-phthalma pendularia* Clk., var. *sub-roseata* Wdf. in Bournemouth: a N. Stafford var. There were very few *Argemnis euphrosyne* about at first, but *A. selene* Schiff. appeared on 16th, becoming common, as did *Diacrisia russula* L. *A. adippe* L. appeared on 18th. *Plusia gamma* L. in varying condition and restless, apparently immigrants, appeared in increasing numbers. The New Forest oaks were quite denuded of leaves by the larvae of *Tortrix viridana* L. Here they hardly suffered from this cause, but were hurt, like the forest oaks, but not so much, owing to being later, by the frost. The young, belated, second foliage of the New Forest was very vulnerable to the invading larvae. *Pamphila sylvanus* Esp. was coming out on 23rd June. An early *Araneus diadematus* Clk. was seen to catch a male *M. aurinia* on a *Carduus pratensis*. The very common *Misumena vatia* Clk., a white crab spider whose hue changes to that of the flower it is on, is a great enemy, lurking on this favourite plant. *V. cardui* flew past on Linwood Bog on 24th June. The larva of *Cucullia verbasci* L. was seen at Blashford on 25th, and two more at Ibsley on 4th July, and *Zygaena trifolii* Esp. was seen here on 27th June. *Salix* at Appleslade is largely dead or dying. The bases are affected by the larvae of *Trypamus cossus* Ramb., and the beetle *Aromia moschata* L., and the stems by the beetle *Cryptorhynchus lapathi* L., especially the narrow-leaved willows: willows are less attacked. *Heptamelus hectus* L. was flying on the rough hillside on 29th June. *A. paphia* L. and *adippe* L. were out in the Forest on 1st July in large numbers, and *L. sibilla* L. was here and in the Forest. *Epinephela janira* L. was getting very common on 2nd, and *E. tiithonus* L. emerging, but it was not to be in the abundance of one or two recent years. *Colias edusa* F. was seen at Bournemouth

on 6th (FCF). On 8th the new brood of *V. urticae* appeared, and the summer brood of *P. brassicae* on 10th. On 12th a fine, fresh pale female *V. c-album* was in the garden, and on 14th a smallish dark male. On 13th *Pamphila thaumas* Hufn. was out, and *L. sibilla* was still on the flower tables of *Heracleum gigantum* at sunset. *V. urticae* was coming in for hibernation on 16th, and *P. brassicae*, later on, were in much reduced numbers, as foretold, owing to parasites. On 22nd an *A. aglaia* that had long frequented the garden was still about, and the new year's brood of *G. rhamni* were out. It is strange that the two species of *Rhammus*, so much more local than the butterfly often is, should be its only food plant. (FCF) on 27th July reported very many *Thecla quercus* L. in Webb's Copse, New Forest, and a large number of *Sphinx pinastri* L. in Bournemouth again. (SGCR) and other collectors reported many var. *nigrina* and other varieties of *L. sibilla* in the neighbourhood. (CM) met with such varieties in Suffolk. Var. *valezina* of *A. paphia* was in our garden and occurred freely in New Forest. *Lycaena aegon* Schiff. was abundant as usual in July, as was *Satyrus semele* L. at the end of the month. A very interesting variety of *V. c-album* with the basal half of all four wings quite black was in the garden on 31st July. The late brood of *L. argiolus* was noted on 3rd Aug., fresh *V. io* were seen on 6th, and a worn *V. cardui* at evening on Ibsley Common. On 12th a form of var. *valezina*, with white spots at the apex of the fore-wings, and intermediates between var. *valezina* and type were noted in Greenford Bottom, New Forest. On 17th another *V. cardui* was seen, and *M. aurinia* larvae were in good nests. On 21st *V. io* came in for hibernation, and on 22nd one was attracted very late in the evening to a lamp. (FCF) reported *C. edusa* at Bournemouth on 24th, and a number of *L. argiolus* were about here. On 29th, on a flowery patch here, was a great gathering of *V. c-album*, *urticae*, *io*, *cardui*, *G. rhamni*, *P. megaera* (scarcer) and *Plusia gamma* which lasted till 1st Sept. and then suddenly disappeared. On 7th Sept. (FCF) reported larvae of *S. pinastri* as common at Bournemouth, and the strange larvae of *Stauropus fagi* L. had been taken on birch. *P. megaera* was still very common on 8th. On 10th (RC) reported *C. edusa* at Ringwood and (HL) at Linwood. On 13th and later several fresh *atalanta* were about, and on 18th *L. argiolus* was still here. (FCF), on 21st, records numerous larvae and pupae of *Sphinx ligustri* L., *Smerinthus populi*, *Deilimia tiliae* L. as often on unusual food plants, e.g. *ligustri* on Laurel and *populi* and *tiliae* on Alder: digging at the roots of which he found several pupae of the two latter. On 23rd a fresh *V. cardui* was noted, and on 29th and into October *C. pamphilus* L. was still flying in the garden, into which month *P. brassicae* and *V. c-album* also extended, the latter to the end. (FCF) saw *C. edusa* on Wallis Down on 3rd Nov. Great numbers of male *Chimabache phryganella* Hb. were present in Webb's Copse, New Forest, on 9th, but the almost wingless females were not searched for. In Nov. on suitable evenings numbers of *Operophtera brumata* L. came to lighted windows here, if not hidden, as did *Asthena dilutata* Bkh. at Bournemouth (FCF). The mild, rainy evening of the 6th Dec. caused several insects to come to light, including many *O. brumata* L. On 13th *Eriogaster populi* L. was on the wing freely and coming to light. On 30th July a *Pamphila comma* L. was mysteriously seen here, far from its chalk haunts, perhaps brought by (FCF) who had, a week before, been at Badbury. Thus mistakes in locality may arise. *Sarothripus revayana* Scop. was noted on 6th Aug.

(AP) gives the following dates for Ringwood: *L. argiolus*, 28th April, and *C. edusa*, 30th Aug.; for New Forest: *Selidosema cinctaria* Schiff., 30th May; *V. c-album*, 15th July.

(EFC) Leckford, says: *V. c-album* was fairly abundant in the early autumn, but the only really unusual butterfly seen here was a fresh specimen of *L. sibilla* on 6th July in the garden. Several *Plusia moneta* F. larvae were feeding on Monkshood, 23rd May. Two moths hatched 26th June.

Col. G. A. Vines, Oaklands, Cosham, 16th July, writes: "Yesterday I saw at close quarters a very fine specimen of *Apatura iris* L." (GAV) on 7th Aug.,

says that he had seen many *L. sibilla* in the garden, and in less than ten minutes on some waste ground on the boundary, in an area of four hundred square yards, eighteen species of Lepidoptera, his list including *A. adippe*, *V. cardui*, *c-album*, *L. sibilla*, *C. edusa* (one female), *Zygaena filipendulae* L. and *Euclidia glyphica* L. On another occasion he saw in addition *Pamphila sylvanus*, *V. atalanta* and, earlier, *L. argiolus*. His main observation was the general increase of *c-album* in Wilts and Hants in the last ten years, and that fritillaries were commoner.

(AFLB) Burghclere, records many *Brephos parthenias* L. flying high on 14th March; *Euchloe cardamines* on 4th May; *L. argiolus* and *H. malvae* on 16th. (AFLB) thought it a poor May and notes that *Saturnia pavonia* L. had, apparently, become extinct in the locality. Many *C. minimus* Fuesl., some of the big variety, and *L. bellargus* were on downs near Winchester; at Burghclere were *Euclidia* m., 17th June; *Macroglossa stellatarum*, 1st July, first for two or three years; *V. c-album*, first, apparently just emerged, 12th July; *L. sibilla*, 19th July, often settling on road, a habit Barrett denies; *T. quercus*, 23rd July, the only one this year; *Melanchra myrtili*, 3rd Aug., on the wing on Common; 21st, *C. edusa*, fresh male on *L. corniculatus*; on 27th and 28th, other males; on 30th one, flying high; 3rd Sept., one; 4th, one flying S., then no more, but the species was received from Col. Stilwell, Sandhurst, on 10th. A second brood of *A. selene* was noted on 28th Aug., and on 30th one of *L. argiolus*. The only *V. cardui* of the year was taken on 31st Aug. Three *Thecla betulae* were seen on 21st Sept. and subsequently till Oct. Second brood of *L. bellargus* was found on 27th Sept. on the downs, the first seen or recorded hence. 15th Oct., *c-album*, *urticae* and *atalanta* were still about. (AFLB) considered it a good year for butterflies, particularly *argiolus*, *edusa*, *paphia* and *sibilla*. (SGCR) speaks of the remarkable emergence of aberrations of *A. paphia* during July in the Forest, many collectors taking them in various enclosures. Col. Burkhardt and (SGCR), working together, got more than twenty varieties of *paphia* and some sixteen more or less black *camillas* (*sibilla*). Some of the former are more or less entirely black (ab. *melaina*), others of the *confluens* form with the spots connected into stripes (ab. *confluens* Spul.). He indicates some remarkable coincidences in various years between certain thunderstorms and the aberrations exhibited in various species of butterflies, including the "Blues," but he will not allow a theory on the facts he stresses, though there is so much suggestive in the observations. The *paphia* varieties appeared suddenly just after two heavy thunderstorms when emergence was at its maximum; other fritillaries, fully out before the storms, did not show unusual signs of variation. He says there was a good brood of autumn *c-album* in evidence to the end of Sept., but the majority had hibernated. *Urticae* were not numerous, owing to some unkind influence, though larvae were. Nor was *io*, though *atalanta* made a good show. *C. edusa* was in all districts, but it was not an "*edusa* year." The various "Blues" appeared to be in fair numbers. It has been pointed out that after a thunderstorm the normal females of *coridon* and *bellargus* become very blue, reverting to the brown form in a week.

(CM) mentions the occurrence of *Aletia turca* L. in several Hants localities. In *E.M.M.*, April 1941, p. 95, there was an account of a noctuid larva in a dog's neck; but subsequently the presumed occurrence was shown to be impossible. In *E.M.M.*, Oct. 1941, F.J.K. notes *C. hyale* in Poole on 18th and 31st Aug., and also several *C. edusa* all flying in a more or less N. direction from the coast, as well as three or four *V. cardui* in that district. In *E.M.M.*, Nov. 1941, A.M.E. notes that he took *Laphygma exigua* Hb. on 31st Aug., at Chele, I.W., and on 9th Sept. *Catocala fraxini* L. on a fence at Ryde, and that *V. cardui* and *C. edusa*, two ab. *helice*, were very abundant. In *E.M.M.*, Dec. 1941, A.M.E. records *C. nupta* L., ab. *brunnescens* Warren, on 30th Sept. on a wall in Ryde. In *Entom.*, July 1941, p. 166, a late *Polia semibrunnea* Haw. is recorded on a fence in New Forest, 18th May. In *Entom.*, Sept. 1941, p. 202, there is a record of two *Apatura iris*, *L. sibilla*, var. *nigrina*, and *Hydriomena picata* Hb.

near Farnham, on 11th July. On p. 210 there is discussion of the time of flight of *H. bombyliiformis* Esp. My Dorset and Hants experience has been that, according to conditions, it has flown from 10 a.m. (G.M.T.) into the afternoon. On p. 211 there is record of *Acosmetia caliginosa* Hb. out in Hampshire 2nd to 8th of June, and on p. 215 a list of first occurrences on the Hants - Surrey border. In *Entom.*, Oct. 1941, p. 236, there are records of *L. sibilla*, male, ab. *nigrina*, and *A. paphia* ab. *valezina* in Stubby Copse, New Forest. In *Entom.*, Nov. 1941, p. 243, there is a record of *Epinephele janira*, ab. *nigrianira*, taken in S. Hants, 22nd July, 1940; on p. 261 the occurrence of *Oria musculosa* Hb. at Micheldever on 21st Aug. is noted, also at Salisbury on 14th.

Coleoptera (Beetles). *Cicindela campestris* L. was noted in Bournemouth on 22nd March (FCF). *Timarcha coriaria* Lh. was crawling on the road by Newlands on 12th April. *C. campestris*, seen here on 22nd of May and earlier, was not as numerous as usual. *Melolontha vulgaris* F. was flying on 27th May and on the evening of 1st June. (TEB) sends an interesting note: "The beetles commence to emerge from the ground in my garden during the first week in May: a fact noticed for twenty-four years. I have found the full-grown larvae at various depths, down to about 18 inches, and once above ground in a rotten birch stump. I do not know when the larva pupates, but have dug up the imago in Jan. and in Nov." *Amara* spp. were running freely on 29th May. Many species of 'click' beetle were about on 18th June. In July, *Cryptorhynchus lapathi* L. was emerging in numbers from *Salix*. *Ephialtes tuberculatus* Frc. and *carbonarius* Chr. and *Pimpla roborator* F. parasitize the *Cryptorhynchus* and *E. heteropus* Thms. the *Aromia*, some of which ichneumons were to be noted near. (FCF) beat the very rare *Agrilus viridis* L. from a sawn in the dried-up pond on 6th July (cf. *Entom.*, Oct. 1941, p. 240). *Lampyrus noctiluca* L. was seen here on 7th July, and *Pterostichus macer* Mm. on 16th. About 20th Aug., an immigrant flight of Ladybirds, chiefly *Adalia bipunctata* L., with far fewer *Coccinella - punctata* L., was noted at Bournemouth. An *Aromia moschata* was on *Angelica* on 2nd Sept. (FCF) found *Carabus violaceus* L., species of *Sternoxi* and many ichneumons hibernating together under the bark of a tree in Amies Wood, New Forest, on 21st Dec. Curiously (FCF) found another specimen of the rather northern and western *Corymbites cupreus* F. in his Bournemouth garden in June. *Tetrops praeusta* L. was found at light here on 6th June, and *Apion loti* K. on 15th. (CM) records the following beetles taken in the Forest: four *Atheta linearis* Grav., Burley Old; two *Ocyusa incrassata* Mt., 30th June, under bark in Queen's Bower; *Thectura cuspidata* Ar., 10th July, common on beech in Denny Wood; *Epipeda plana* Gy., 10th July, common on beech in Denny Wood; *Dinaraea aequata* Er., June and July, on stools of newly-felled big oaks in Rhinefield Sandys; *Philonthus puella* Nr., 1st June, one swept in Stubby Copse. (CM) records in *E.M.M.*, June 1941, *Apion armatum* Gerst., a species new to the British list, taken by him in mid-summer in New Forest. Hazel was much affected by the nut weevil, *Balaninus nucum* L. this year.

Diptera (Flies). *Sepsis punctum* F. and other flies were common on *Salix* on 16th March, and *Simulium* sp. was biting here on 25th and after, badly. *Xanthogramma citrofasciatum* Deg. was seen on 9th June. No examples of the rare *Anthrax circumdatus* Mg. nor *Physocephala nigra* Deg. occurred, as in 1939. *Merodon equestris* F. chiefly var. *narcissi* F. were common over bulb beds and elsewhere on 21st June. *Echinomyia grossa* L. was seen on 10th July. It seems to have altered its habits, frequenting various low plants, as *Thymus*, instead of confining itself so largely to *Umbelliferae* (*Heracleum*, *Angelica*). It also basks more on stones, like *Blaesoxypa*. *Anthrax fenestratus* Fln. was in good numbers on the usual path, and other spots near, on 23rd July. *Tabanus sudericus* Slr. was out on the 21st, but *Tabanidae* and some other insects were often remarkably scarce. A male *Theriopectes distinguendus* Verr. was hovering on 4th Aug., at early morning, opposite our door. That a male thus hovers

has been noted every year since. (JEC) drew my attention to one doing this several years ago. It is comparable to the way in which *A. fenestratus* settles annually on a particular stretch of path. Other insects do similarly. It seems inexplicable as there is no psychological connection between generation and generation of insects. *Pipiza lugubris* F. was noticed on *Angelica* on 30th Oct. Great numbers of mosquitos, largely *Anopheles maculipennis* Mg., were observed in the house, outhouses, on woodwork, and flying on 27th Sept. and subsequently, previous to hibernation. *Fabricia ferox* L. was seen on 3rd Oct. and *Sericomyia borealis* Flin. remained abundant into Nov. (EMR) wrote me on 20th July that he took a fine specimen of *Volusella zonaria* at Lodmoor, near Weymouth, (CDD) having previously taken one at Dorchester. The only authentic British specimen before these captures was Dr. Sharp's, in Wood Crates, New Forest, years ago. I had a very old specimen in my collection that was perhaps taken at Edenbridge where hornets, on which it is an inquiline, abounded. (JS) secured, in Isle of Wight, a number of Trypetidae, a family of minute flies, often with ornamental wings, whose larvae mine parts of plants, in various stages, many of the pupae sent producing interesting parasites. The flies included *Phagocarpus permundus* Harr.; *Acidia cognata* Wied.; *Philophylla herachii* L., *forma*, *centaureae* F. and *forma*, *onopordinis* F.; *Spilographs alternatus* Flin.; *Orellia vectensis* Coll.; *Trypeta onotrophes* Lw.; *T. tussilaginis* F.; *T. serratae* L.; *Myopites blottii* Breb.; *M. longirostris* Lw., from Shalfleet; *Euribia jaceana* Hen.; *Urophora quadrifasciata* Mg.; *U. cardui* L.; *Sphenella marginata* Flin.; *Ictericia westermanni* Mg.; *Tephritis miliaria* Schrk.; *T. plantaginis* Hal.; *T. vespertina* Lw. Morey's "Guide" only enumerates five species in the family. (JS) has already a list of thirty-one species for the Island.

(CM) sends a list of 39 species of *Limnobiidae*, taken in New Forest, from which I quote some of the rarer. *Dicranomyia pilipennis* Egg., males at Bratley Bog and Boldre in June and July; *D. stigmatica* Mg. at light, at night, in Denny Wood in June; (FWE) says "Mountain bogs." *D. complicata* Meij. flying in Denny Bog, 6th July; (FWE) says "Coastal marshes." *D. sera* Walk., Lyndhurst pales, July; (FWE) says "Coastal marshes." *Limnobia bifasciata* Schrr., Lyndhurst, June and July; *L. annulata* L., Park Hill, Denny, Rhinefields, June and July, flying and sitting; *L. masoni* Edw., Lyndhurst pales, and heather at Ladycross, June and July; (FWE) says "Derby, Norfolk, Oxford, June." *L. quadrinaculata* L., several flying at dead beech stumps, Denny Wood, June; *Erioptera divisa* Walk., Rhinefield Sandys, June; *Lipsothrix nervosa* Edw. (CM) says the first British specimen was taken in New Forest and that he took the second flying in sun in Matley Bog in July: (FWE) later found an earlier specimen in B.M., taken by Eaton in Dendles Wood, in 1915, and took it also by a shady stream in E. Devon. *Idioptera pulchella* Mg., Matley Bog, 17th June; *I. apicata* Lw., Pondhead and Brockenhurst, July; (FWE) says "Streamsides in N. and W." *I. maculata* Mg., Matley Bog, flying in alder shade in June; *Dactylolabis transversa* Mg., swept abundantly along with *Trichoptilus paludum* Zell., over *Drosera* in Matley Bog, at dusk, in June; (FWE) says "Wet rocks in N. and W." *Limnophila lineola* Mg., at light, at night, in Denny Wood, in June; *L. lucorum* Mg., Holiday Hill and Lyndhurst pales in June and July; *L. adjuncta* Walk., on dead beech in Denny Wood, many of both sexes on iron pales, at Island Thorns, June and July; *Pedicia rivosa* L., Matley Bog, Pondhead and Denny, at light, July; (CM) says in Suffolk it occurs only in Sept.; I have seen it in Inverness in June.

(FCF) took *Theriopectes micans* Mg. on 14th June, at Hern. Some notes on its habits have appeared in *E.M.M.*, Sept. and Oct, 1941. It was common on the Frome marshes at Iford, near Winfrith, when the males would frequent the umbels of *Heracleum* at 11 a.m. to 3 p.m. (GMT), the females flying round us; everywhere the soil was damp. *Winthemia quadripustulata* F. was bred from a *Cucullia verbasci* larva found at Ibsley, 4th July, emerging 12th Aug.

as did (?) *Pelmatomyia phalaenaria* Rond. from the same host, found at the same time and place!

Acrocera globulus Pz. was found indoors here on 22nd July, searching for spiders on which it is parasitic. *Eristalis sepulchralis* F. was taken at Hern on 20th of July by (FCF); *Chrysotoxum vernale* L.w. was noted here on 13th June, and *Drosophila obscura* Flm. on 7th Sept.

Hymenoptera (Sawflies, Gallflies, Ichneumon-flies, Ruby-tailed flies, Ants, Wasps and Bees). *Apis mellifica* L. was flying in Feb.; *Bombus lucorum* L. was working *Crocus* on 13th March, and was in numbers with, I think, *terrestris* L. and *Andrena albicans* K. on 16th. (FCF) on 5th April found strong colonies of *Andrena* spp. in a clay-pit at Bournemouth working strongly. He took many specimens of *A. nitida* Fourc., also *A. albicans* K. and *A. clarkella* K., together with *Nomada borealis* Zett., the parasite of *clarkella*. *Pompilus viaticus* L. was also seen. *B. terrestris* was getting common on 23rd April. *Andrens jacobii* Pk. was seen on 4th May. *Vespa crabro*, queen, was noted here on 16th May and *Odynerus* sp. on 17th and a *Vespa* sp. on 19th. (IY) took females of *A. ferox* Sm. at the old locality on 28th May; the male only was taken some days previously. Many ichneumons (*Pimpla*, *Paniscus* and others) were flying on 1st June. A *Tenthredo mesomela* L. taken by (FCF) at Hern. ate a large part of an *Ephemera danica* boxed with it. A *Tenthredopsis* sp. was also noted at Hern. Such Sawflies as *T. mesomela* and *T. viridis* L. and the common species of *Selandria* and *Athalia* were much in evidence through June. The species of *Bombus* were not very numerous, but *B. lucorum* was fairly plentiful, and *B. terrestris* perhaps more so. There was a good sprinkling of *B. agrorum* F. but fewer *B. humilis* Illig. On 27th June, *Perithous divinator* Rossi. was noted as very common, prospecting woodwork for cells of *Odynerus*, *Fossor*es or other hosts. *Megachile* spp. were numerous in June, a few *willughbielle* K., *circumcincta* Lep., *ligniseca* K., *centuncularis* L. and the males of *Ichneumon* were becoming frequent. (FCF) took *Cimbex femorata* Flm. in Bournemouth on 28th June. *Bombus lapidarius* L., queens, had got common by 29th June, when a small female *Mutilla europaea* L. was found on the path past the house. *Ammophila campestris* Latr. was not noted commonly till 13th July. A queen *Vespa crabro* was prospecting for a nest round an outdoor room on 17th July. But the season was not prolific in wasps and hornets and hardly any were seen to the end of Aug., when *V. rufa* L. increased. There were but few later. *Odynerus* spp. were fairly plentiful throughout their season, beginning early, they continued late. Very few insects were noted on the Angelica in the autumn, except *Eristalis* spp., *Crabro cribrarius* L. and the most common. *Lasius flavus* F. was swarming freely, everywhere, at the end of Aug. (HTW) noted ants, specially on 24th, as leaving nests, flying high and being fed on by starlings. On 13th Sept. many species of bees (*Andrena* *Megachile*, *Coelioxys* and of other genera), as well as of Vespidae and Fossoreres (like *Mutilla europaea* which was actively prospecting), were still about and remarkably late and abundant, together with many *P. megaera* and *egeria*, worn and fresh. On 15th Sept. a nest of *Bombus latreillellus* K., noted earlier, was found dug out by badgers. The numbed survivors worked in scattered groups for a few days, and then gradually succumbed to exposure and frost. On 17th, a small species of *Pompilus*, with basally red abdomen, was going backwards at an extraordinary rate with a young spider, probably *Trochosa terricola* Thor., which it had stung and paralysed. On 19th, *Megachile ligniseca*, which had been common, was basking on the greenhouse door, and a very late *Anthrophora furcata* Pz., female, was on *Hieraceum sabaudum* in the garden on the 23rd, while several *Bombus* spp. extended far into Oct. and a small *Odynerus* was on the window on 6th Oct. A fresh *Bombus lucorum*, queen, was on Scabious on 19th. The mild, rainy evening of 6th Dec. brought *Ophion obscuras* F. to light. On 21st Dec. (FCF) found a very large number of *Ichneumon extensorius* L. hibernating together under bark in Amies Wood.

Specimens of the Alysiid Braconid *Adelura sylvia* Hal. were bred on 12th Oct. from pupae of *Acidia heractii* found in I.W. 12th Sept. Many chalcids, (?) nr. *Panstenon assimilis*, Nees., emerged at long intervals, 14th July to 22nd Aug., together with *Pteromalus lucilla*, Walk., on 14th July from pupae of *Phagocarpus permundus*: doubtless the long delayed period of emergence of the parasites has significance, safeguarding them from temporary unfavourable conditions that may arise in a season. *Ablepharipus podagricus* V.d.L. was taken at Hern on 20th July, and a *Clytochrysus chrysostomus* Lep. et Br., taken at the same date and place, was a typical for its section, having the ocelli placed equilaterally, and not in an isosceles triangle, and other divergences. *Andrena analis* Pz. was also found.

The following ichneumonids may be mentioned: *Ichneumon rufidens* Wesm. found here on 10th Aug.; (?) *Amblyteles subsericans* Grav. 1st June (very close, but does not look like this species); *Giraudia congruens* Grav., 15th June; *Attractodes exilis* Hal., Hern, 20th July; *Pimpla brevicornis* Gr., found indoors, 23rd April; *P. pomorum* Ratz., 27th April; *P. turionellae* L., 23rd April; *P. maculata* F., 27th April; *Lissonota variabilis* Hlgr., Rockford, 5th Oct.; (?) *Orihocentrus discolor* Hlgr. = *Chorinaeus asper* Gr. (areolet present), 27th April; (?) *Dicolus subtiliventris* Forst., 1st June; *Helictes borealis* Hlgr., 1st June; *Limnerium rufifemur* Thoms., Hern, 7th July; *Angitia interrupta* Hlgr., 27th Aug.; *Paniscus virgatus* Fourc. (venation abnormal for Tribe), 1st June; *P. latungula* Thoms., 1st June. The braconids *Bracon satanas* Wesm. and *Liophron ater* Nees. were found here on 15th June.

Assistance has been kindly given by several correspondents: the following abbreviations have been used:—

Capt. A. F. L. Bacon, M.A.	(AFLB).	C. Morley, F.R.E.S., F.Z.S., F.G.S. (CM).
T. E. Belcher	(TB).	A. J. Ponchaud (AP).
C. J. Bellamy	(CB).	Rev. E. M. Reynolds, M.A. (BR).
Miss E. F. Chawner, F.R.E.S.	(EFC).	S. G. Castle-Russell, /
R. W. Christy	(RC).	M.I.E.E. (SGCR).
Col. F. C. Fraser,		J. W. Saunt (JS).
M.D., F.R.E.S.	(FCF).	Col. G. A. Vines (GAV).
L. Beeching Hall	(LBH).	H. T. White (HW).
H. Lea, Mr. and Mrs.	(HL).	I. H. H. Yarrow,
		M.A., F.R.E.S. (IY).

In the nomenclature of the Lepidoptera I have followed Meyrick's *Revised Handbook* (1927).