

INSECTS IN HAMPSHIRE, 1943.

By F. H. HAINES.

January was a very mild, wet month with occasional S.W. gales, though some days were sunny and spring-like. Night frosts were slight. (Rainfall, 7.14 inches.) It was succeeded by a much drier, but mild and often sunny, February, colder at the end, night frosts being present. Gales were not frequent inland. (Rainfall, 1.47 inches.) A dry, often sunny, March was marked by much N.E. wind, and frosts at night were more severe. (Rainfall, .76 inches.) April was dry, very sunny and pleasant, the temperature being usually high. A few slight night frosts occurred, but one of 10 deg. F. Two spells of high winds, at the beginning and the end were chiefly W. or N.W. (Rainfall, .69 inches.) The beginning of May was cold and inclement, contrasting with April. Later the month was very genial, with much sun and warmth. The rain was mainly just before and just after the middle. May was rather windy, especially in the first third. Night frosts were usually absent. (Rainfall, 3.07in.) The first eighteen days of June were often cold and windy. The latter part was generally very sunny, but nights occasionally cold, and wind strong. (Rainfall, 1.53in.) The first and last weeks of July were usually very fine, hot and sunny, the middle part often cloudy and rainy, and gales occurred. (Rainfall, 2.40in.) Sombre weather with cool winds marked August, but there was a genial spell in the middle of the month. Temperature was moderate, both by day and night, but it sank to 32 deg. F., with N. wind, on night of 11th. (Rainfall, 1.71in.) August was succeeded by a cool, sunless, not very windy September. Warmer nights were alternated with slight frosts. (Rainfall, 2.30in.) October was a pleasant, mild month: the first part very sunny, the middle rainy, the end generally mild, fine and calm, with but few gales inland. Nights were almost frostless. (Rainfall, 4.95in.) The dull, cold November had a fair amount of wind. There were sunny days, but often cold nights, which occasionally developed 12 deg. of frost. At times fog prevailed. (Rainfall, 1.94in.) December was rather cold and sunless, though without any severe spell of frost, and night frosts were not intense. There was little snow. Its prevailing calm was broken by a single gale. (Rainfall, 2.82in.) The total rainfall for the year at Appleslade was 30.64in.

On 12th June it was noted that there appeared to be an unusual scarcity of some insects, following a quite wonderful abundance in the best days of April and May.

Orthoptera (Earwigs, Cockroaches, Crickets and Grasshoppers). (CA) found *Tettix subulatus* L. in the spring, but no *ceperoi* Bol. Searching at Marlborough Deepes on 18th September he saw only *Omocestus ventralis* Ztt. (*rufipes*) and *Chorthippus albo-marginatus* De G. (*elegans*). On 25th September the only *Tettix* found was *vittatus* Ztt., which was fairly plentiful. The common species hitherto known as *bipunctatus* in this country is now shown by Uvarov to be *vittatus* Ztt. True *bipunctatus*, though native, is apparently very local or rare. *Chorthippus bicolor* Ch. ; *O. viridulus* L. ; *O. ventralis* Ztt. (*rufipes*) ; *C. parallelus* Ztt. ; *C. albomarginatus* De G. (*elegans*) and *Myrmeleotettix* (*Gomphoceris*) *maculatus* Th. were all present. On 18th May, at Appleslade, very many small grasshopper nymphs were noted, and on 9th October, *C. bicolor*, as usual, was still common.

Plecoptera (Stone-flies). 11th May, Hern, *Chloroperla grammatica* Scop. (FCF).

Ephemeroptera (Mayflies). (FCF) on 11th May, Hern, saw *Ephemera danica* Müll., and many small *Ephemeridae*.

Odonata (Dragonflies). (CA) on 29th May, at Ober Water, saw *Gomphus vulgatissimus* L. in fair numbers. *O. coerulescens* F. L. ; *depressa* L. ; *C. boltonii* Don., one ; *P. pennipes* Pall. ; *A. virgo* L. ; *I. elegans* V. der L. and *P. nymphula* Sulz. He saw *O. coerulescens* F. on 17th July, at Broomy, Dockens and Linwood. (FCF) saw *P. nymphula* emerging in great numbers from a pond on Wallis Down on 12th April, and saw a *C. boltonii* at Parkstone on 19th April ! On 23rd May, at Hern, he found *G. vulgatissimus* and *L. fulva*, but nothing else save *P. nymphula* and one *L. quadrimaculata* L., *A. imperator* Leach, was common at Bournemouth on 1st June. Most interesting records are sent to me by Mr. E. C. Bathe and (FCF) of the taking by them and Dr. Killington of the rare *I. pumilio* in new localities in Bournemouth and Parkstone, on 11th June and later (cf. *E.M.M.*, January, 1944, p. 12). Mr. Bathe and Dr. Killington watched the spider *Dolomedes fimbriatus* Wlk. attack and kill the large *Aeschna juncea* L. : a female, which was ovipositing in a small pool. She suddenly fell limp. They then saw the spider on the back of the thorax. The victim was quite dead when taken out. They noted other spiders of this species resting on floating debris, also on the look-out for prey. *P. nymphula* was seen at Appleslade on 24th April and later became very numerous. On 15th May, *Agrion splendens* was on the Avon at Ibsley. On 18th May, *Agrion virgo* and *L. depressa* were seen here. On 12th June, *O. coerulescens*, very teneral, was noted near the source of Dockens Water. On 20th June, *Aeschna cyanea* was seen. On 1st August, *Aeschna mixta* was seen here in the evening, and continued on its beat near some honeysuckle till the 16th August and after. On 18th August some *S. striolatum* Ch. were observed on Linwood Bog, and on 6th September two *Ae. cyanea* were flying, one at the front and one at the back of the house, the species being noted until the 13th September.

Hemiptera : Heteroptera (Bugs). On 11th September, at Appleslade, *Piezodorus lituratus* F. was seen in a spider's web. *Picromerus bidens* L. was as common as ever both before and after 11th October. Its voracity and carnivorous habits must make it at times of real economic importance. (FCF) records two *Corixa* in a bog-pool at Bournemouth in December, 1942.

Homoptera (Frog-hoppers, Cuckoo-spits, Plant-lice and Scale Insects). Mr. W. E. China (in litt.) tells me that the nymphs of *Cercopis sanguinea* Geoff. have been dug up in an allotment in Sussex, in December, when the ground was frozen, and were found surrounded with froth, thus indicating that feeding was taking place. It is the only British species of the family (*Cercopidae*) with a subterranean life history, all the others form froth on the aerial shoots of plants. It is common south of the Thames, rarer further north, the northernmost range being Yorkshire. On 17th March I dug up here, from six to nine inches underground, masses of cuckoo spit with the nymphs at the roots of grass. The air bubbles in the froth looked larger than usual. On 15th October, cuckoo-spit evidently caused by this species was noted in a large patch here,

amongst mixed grasses, but showing above ground.. On 13th September a very large *Aphis*, *Melanoxanthus salicis* L., was common on willow.

Mecoptera (Scorpion-flies). On 27th May, both species of *Panorpa*, *germanica* L. and *communis* L., were getting common.

Neuroptera (Alder-flies, Snake-flies, Brown and Green Lace-wings). (FCF) sends me an interesting account of a further experience with the scarce *Kimminsia rava* With. in its Bournemouth locality. Choosing 10th May, a warm, damp day with a gentle S.W. breeze, which he judged favourable for the annual (*en masse*) emergence of the insect, he went to the pine copse at 9.30 a.m. (7.30 insect time) and found four emerging at the foot of pines. He left them until 11.30 to expand their wings, when he found 23 on several dozen pines examined. There were five on one tree and three on another, the rest were found singly. A few, three or four, *Raphidia maculicollis* St. were emerging with them. To prove that this emergence takes place on only one day, he went again to the locality the following day. He did not find a single one. Great quantities of *R. maculicollis* were emerging, an average of one on every trunk, showing that the day was entirely favourable. He queries the cause of this spontaneity, whether due to warmth, moisture or atmospheric pressure, or a combination of these factors. (FCF) took two *Sialis fuligmosa* on 11th May, at Hern.

On 25th February, *Chrysopa carnea* St. (*forma carnea*) was attracted by light at evening. A species of *Sialis* was seen by Dockens on 16th May, and both *S. lutaria* and *S. fuliginosa* on 18th, when *Chrysopa perla* L. was well out, to swarm by the 27th. On 30th June, the striking *Osmylus fulvicephalus* Scop. was found here by the stream. On 16th October, *C. carnea* came to light of an evening, the species not being seen so much this autumn as often. Specimens, however, continued to come, in some number, through October, November, and December. *Eumicromus angulatus* St. has been scarce this season.

Lepidoptera (Butterflies and Moths). I am much indebted to Col. V. R. Burkhart and Mr. S. G. Castle-Russell for the following notes on Hampshire butterflies and their variations in 1943: "The winter was exceptionally mild. An abnormal amount of sun brought out the hibernators long before their usual date of emergence. On 27th January (temp. 45 deg. F. at 10 a.m., G.M.T.) *V. Io* was observed flying in sheltered corners. On 19th February, *V. Io*, *V. urticae* and *G. rhamni* were all seen in various localities. From 24th February, onwards, the *Vanessidae* were out on all sunny days (fifteen out of twenty to mid-March). First *C. album* noted that day. One *P. rapae*, male, seen 18th March. This insect was in fair numbers on 27th, when a *P. brassicae*, female, and a *P. egéria*, male, were taken for examination. On 28th March, a male *V. polychloros* was taken by V. R. B. in the New Forest on the banks of the Avon Water, and several others were seen at Lyndhurst. *E. cardamines*, male, was out on 3rd April, and later was more abundant in this district than usual. *L. argiolus* was seen in the New Forest during this week. A week of cold winds retarded the emergence, but on 13th April the lanes were full of *io* and *urticae*, and the first *S. malvae* was observed. *C. phlaeas* was first seen on 5th April. On 17th April, *E. tages* was out, and *V. c-album* seen laying eggs on Wych Elm. The first *B. euphrosyne*, male, emerged on 21st April, but the insect was not abundant till ten days later. Even then it was only about a third as strong as in 1942. Only minor aberrations, banded forms, etc., were taken in the Forest (VRB). *P. megaera* was out on 1st May, and on 4th a male form with rudimentary apical spots was found by VRB in Wood Fildley. *L. sibilla* larvae were first found on 28th March, and they had begun to turn green on 24th April. *H. lucina* was on the wing on 3rd May, and proved more abundant than usual. *C. pamphilus* was well out by the end of the first week in May. Nests of *urticae* and *io* larvae were exceptionally abundant, more hibernated females than usual being noted. Some disease, however, affected the larvae, which fed up, grew flabby and died before pupating. Larvae were also heavily parasitized. *M. aurinia* and *c-album* were similarly affected. *P. idarus* was seen in the Forest

on 13th May, and the first *B. selene* on 23rd. The latter were very scarce in the Forest this year, and the scattered colonies barely exceeded twenty insects. No aberrations were recorded. On 30th May, near New Milton, the following were noted: *B. euphrosyne* (worm), *B. selene*, *B. icarus*, *T. rubi*, *E. cardamines*, *C. pamphilus*, *P. egeria*, *P. brassicae* and *rapae*, but all in restricted numbers. Three fresh *V. cardui* were seen: one female with fringes so intact that it was difficult to believe it was a migrant. *M. jurtina*, males, were first seen in the New Forest on 3rd June, on which day nests of *V. io* larvae were found. On 5th, *O. venata* and *V. atalanta* were on the wing. On the 11th June, in Wood Fildley, two *A. cydippe*, one *A. paphia*, male, one *L. camilla*, and a fresh *V. urticae* were observed, and a single *C. croceus* flying rapidly. On the morning of 12th, a female *C. croceus* was taken near New Milton and, in the afternoon, a *helice* (var. *pallida*) was captured in the road for breeding. Ova were obtained from this female: females and a curious small gynandrous specimen being bred, the last part type and part *helice*. Two more males were seen the same day. *P. argus* was out in some numbers on 21st June, but was far less abundant than usual in its main Forest stronghold. Minor *striata* forms, *costa-juncta* and one *fusco-fimbriata* were the only vars. *A. cydippe* was very scarce in the New Forest. A nice melanic var. was taken rather late in the emergence by E. E. Johnson (16th July). On 19th May, *euphrosyne* and *Venata macularia* were flying in numbers near Brockenhurst, and a remarkable melanic aberration of the latter was taken by S.G.C.R. Early males of *A. paphia* gave a promise of abundance, but the females failed entirely. In one part of the Forest, *valezina* was more in evidence than the normal female, whilst at Park Hill this variety was absent. This insect showed very little variation after two years in which striking vars. had been abundant. A few white-spotted males were taken, and two *post-confluens* (V.R.B.). One *anti-confluens*, female, was captured. *L. camilla*, aberration *nigrina*, was rarer than usual. One was taken (E. E. Johnson). Var., aberration *semi-nigrina*, female, with black hind, and cloudy fore-wings, was captured by V.R.B. on 15th July, who also saw a fresh *semi-nigrina* female on 4th July. The summer brood of *c-album* was first seen on 24th June, but the insect was scarce in the Forest. *A. hyperanthus* appeared on 22nd June, but no aberrations were taken. On 1st July a single *M. tithonus* was seen in the Forest, but the species was not abundant till three weeks later. On 26th, S.G.C.R. took a fresh *mincki* female, primrose colour, near New Milton, and on 31st the variety *albida* was taken by V.R.B. in the same locality. Minor addenda and specimens with one white wing were also captured. The summer brood of *V. io* appeared on 17th July, by which time *V. urticae* nests were remarkably abundant. Home-bred *C. croceus* were in evidence from 27th July, when a female was taken for breeding. The second brood of *phlaeas* was on the wing on 31st July, but was very short. *E. semele* was then well out and rather abundant. A very strong brood of *P. megaera* emerged at the end of July, and lasted abundantly well into August. A restricted, and very local, third brood appeared from 27th September to mid-October. A clover field near New Milton was very productive of *C. croceus*, and S.G.C.R. took eight *helice* for breeding in mid-August. The brood was evidently strong, for in gathering food-plant casually he found several larvae feeding up. These emerged in nature from the end of September to mid-October, but those in captivity failed to survive the earlier moults.

The autumn brood of *V. urticae* was disappointing in view of the large number of nests of larvae. Parasites and the unnamed disease apparently accounted for the majority. To ensure a spring succession, some of the females began laying instead of going into hibernation. Patches of nettle, well in the open, away from any shade, were selected, and a fairly strong brood emerged the second week in October. This batch was entirely free from disease and parasites. *C. phlaeas* had a much stronger brood than either of its predecessors, but there was no variation. An occasional late *M. jurtina* was on the wing till late September. Among the female *megaera* there was a tendency to aberration *meridionalis*, but not in its extreme form. Male and female with rudimentary spots were taken (V.R.B.). A fresh *C. croceus*, aberration *pallida*,

was taken on 15th October (V.R.B.), and during the week a number of males and females, mostly small, were seen. The season has been remarkable for producing insects much earlier than normally due, and much later at the end."

(GB) reported a male *Deilephila lineata* F. on 31st May, and a female on 6th June at Hern. There was a large immigration of this and other migrants in 1943.

(AFLB) Burghclere, saw: *V. io* and *urticae* on 1st March, *G. rhamni* on 15th, *P. rapae* on 20th, *B. parthenias*, numbers, on 27th; *E. cardamines* on 3rd April, a few *S. pavonia* on a common on 24th; *A. euphrosyne*, *H. malvae*, and *tages* on 4th May, *Tephrosia punctulata* on a birch trunk on 12th, a fresh *H. tityus* over Lousewort at 10.20 a.m. on 15th, *V. atalanta* on 15th, *H. fuciformis* at 10.35 a.m. on 16th, *B. rubi* on 18th, *E. mi* and *glyphica* on 19th; *D. porcellus* on 5th, 6th and 10th June; *C. minimus* and *L. bellargus* on Winchester Downs on 9th; the last *H. fuciformis* on 11th; a small colony of *C. minimus* was found on Downs at Burghclere on 21st, many *Z. trifolii* on 21st, *L. sibilla* and *A. paphia* on 28th; *M. stellatarum* on 1st July, others and *L. aegon* on 2nd and 3rd, male *A. paphia* on 14th, *T. quercus*, several, on 19th, 22nd, and 24th; *E. janira* and *E. hyperanthus* on 26th, male *M. galathea* on Downs, a species that has much dwindled of late years, on 27th; *S. semele* and *L. corydon* on Downs, two male *C. edusa* in a cutting, and very many in a rough field on 9th August to 23rd September, all males. (AFLB) draws attention to the extraordinary sex ratio. *A. aglaia* was seen on 11th and 13th August and two *S. semele*, which was not common, on 12th; *M. stellatarum*, which became common on 13th September; *P. egeria* was recorded for the first time at Burghclere on 24th, another being seen on 25th. *P. gamma* was numerous. (AFLB) says it was a record year at Burghclere for *M. stellatarum* and *C. edusa*, but no *D. lineata* was seen. *L. argiolus* was not noted, other "Blues" were common. Vanessaids were plentiful, including a *V. c-album* with coal-black under-wings.

(CP) observed *M. stellatarum* in Mudeford on 27th September. (HL) Linwood, saw: *V. c-album* on 2nd February; *G. rhamni*, *V. atalanta* and *urticae* on 7th March; *P. rapae* on 15th April; *L. argiolus* and *P. aegeria* on 16th; *L. sibilla* on 26th June; several *V. c-album* and *atalanta* on 15th Sept. (HC) reports *C. edusa* on Boscombe cliffs in early October and many *V. c-album* and a worn *V. cardui* on 24th at Ringwood. (GP) saw *C. edusa* at Bursledon for the first time last summer. (CA) Sandleheath, reported that he found *P. flavicornis* on birch trunks, and saw *B. parthenias* flying on 20th March. He recorded *M. aurinia* in New Forest at end of May, *A. paphia*, male, at Sandleheath on 15th June, and *L. sibilla* on 26th; *C. edusa*, female, worn, *V. atalanta* and *cardui* on 1st July, many *T. quercus* flying round oak-tops in the evening sunshine, Alderholt, on 7th, two male *C. edusa* at Sandleheath on 16th, many *A. paphia*, *adippe* and *aglaia*, *L. sibilla*, worn, *S. semele*, *P. egeria*, *E. tithonus* and *E. hyperanthus* on 17th; and *C. phlaeas* on 2nd November, a very late date. (BFC) Leckford, records *P. fuliginosa* flying on 8th May and *E. cardamines*; *C. edusa* which became very numerous, three *C. hyale*, *V. cardui*, *L. corydon* all quite abundant, and a normal number of *M. galathea* on 24th July; *M. stellatarum*, which appeared to be fresh from pupa, and kept about for days, despite rather severe night frosts, and *V. cardui* on 24th September, and *S. libatrix* on 23rd October. (FCF) records many *C. edusa* at Bourne-mouth, including seven helice and other varieties, and R. Wallace found a larva of *D. lineata* in a ploughed field on Dock. (AP) Ringwood, reports *L. argiolus* on 3rd April, *E. cardamines* on 13th; *A. euphrosyne*, New Forest, on 1st May, *A. selene*, New Forest, on 29th; *A. adippe*, New Forest, on 12th June, *L. sibilla*, New Forest, on 26th; *A. paphia*, New Forest, on 3rd July, *P. galathea*, New Forest, one near Linford, on 3rd; *C. musculosa* on 7th August and two worn specimens on 11th September; *C. convoluti*, male, taken off pillar box on 8th September. (AP) says *C. edusa* was in good numbers, small Fritillaries in less numbers in New Forest than usual, and the large Fritillaries rarer than he ever remembers. (CB) Ringwood, caught a freshly emerged *D. lineata* at the bloom of *N. affinis* in his garden on 15th September,

taking a female *S. convolvuli* on the same date. A male was taken on 13th. (EC) Sway, found a full-grown larva of *Papilio machaon* feeding on *Silva flavescens* in his garden on 17th September. On 31st August, a *C. nupta* was on the house. (EMcE) Droxford, records *D. lineata* over petunias in September, seeing the last on 2nd October.

A male *G. rhamni* was flying at Appleslade on 24th February, and *V. io* on 7th March; *V. c-album* was in the sunny garden on 18th March. *P. aegeria* was seen on 19th; on 28th March, *B. parthenias* was seen flying in sunshine here at midday; on 16th April, *B. atomarius* was out; on 13th May, *A. euphrosyne* was common near, as was *P. megaera*; *P. macularia* was also about abundantly, and *A. viridella* in swarms; on 17th May, *C. phlaeas* was seen and *C. pamphilus* out. On 21st May, *T. rubi* was about and *P. fuliginosa* seen, and *E. rubi*, male, was flying wildly in late afternoon. On 22nd May, *H. fuciformis* was on Rhododendron. On 23rd May, *P. brassicae* was seen, but not many noted up to then; by May 24th, a few *O. pseudopretella* had emerged indoors; by 27th, *B. piniarius*, male and female, were about and a fine female variety of *P. megaera* was taken. On 29th, variety of *P. napi* was noted and a few specimens of *P. gamma*, doubtless emigrants, on the wing; a few *M. aurima*, males, seen; on 31st, *B. jacobaeae* and *D. russula* were out; on 7th June, a sprinkling of *T. viridana* was showing in the Forest, and also *L. sibilla* and *E. janira*; on 9th June, *P. sylvanus* was appearing here; on 10th, *H. bilineata* was out, and on 12th *Z. trifolii* was coming out freely. It was a very good year for *H. fuciformis*. Many *T. viridana* flew in the neighbouring New Forest on 13th. On 17th, insects were few, owing to the bad weather, but *A. selene*, *P. sylvanus*, and *C. pamphilus* were common; on 20th, *A. paphia* was quite in evidence and *A. adippe* coming out; on 22nd, a rather faded *V. atalanta* was seen in Appleslade and *T. quercus* in Pinnick. No *A. formiciformis* were seen. Many insects seemed early this season. On 29th, numbers of *L. aegon* were in Appleslade; on 6th July, *V. c-album* was seen near Anses Wood; on 13th, many *P. thaunus* seen and *E. tithonus* appearing in numbers; on 22nd many fresh *V. io* on the wing, and the August brood of *P. megaera* out, *S. semele* was getting common; on 31st, the fresh brood of *G. rhamni* was coming out, and *P. gamma* about; August 1st, *C. phlaeas* was seen here, it was scarce; on 9th, *L. corydon* was taken over thistles, perhaps blown by N. winds from the chalk Downs to the N. or N.W.; on 10th, one or two more were seen. Butterflies showed a very migrant tendency; even our sedentary home stock wandered. *Corydon* and *galathea* are very unusual in the New Forest; on 13th, *V. io* was coming in to hibernate; on 25th, a great number of *T. promuba* appeared, indoors and out, rather suddenly; on 8th September, *C. edusa* was noted at Rockford; on 13th, a great number of *V. atalanta* were seen fluttering among the top foliage of an oak, and a few *Notodonta* and *Cerura* larvae were beaten; on 15th, *C. edusa* was seen near, and *V. urticae* came indoors to hibernate. On 16th October, fresh *C. phlaeas* was seen; on 17th, *O. hexadactyla* was at light, and on 18th *O. satellitia* at light, also *D. arenaria*, disturbed from hibernation.

In the *Entomologist* of March, 1943, p. 86, is a curious case of the fatal hanging from the fork of a reed of a larva of *E. rubi*. In that of June, the finding of *S. pinastri* on 23rd of April and of *E. punctulata*, on 11th, is announced, as also a probable instance of the hibernation of *V. atalanta*. Some very early emergences are noted in Vol. LXXVI, p. 132 and p. 147; *V. c-album* and *V. polychlorus* are reported on 21st March in New Forest. On 12th June, three *C. edusa* were seen in New Forest and various early dates of Hampshire Lepidoptera are given in Vol. LXXVI, p. 154, and a New Forest var. of *A. selene* is described on p. 172. Hants records of *C. edusa*, *V. polychlorus* and *D. lineata* are on pp. 181 and 189. Hants *C. edusa* is recorded on p. 208 and a very early New Forest *argiolus*, 4th April. An interesting account of the extension of range of *P. aegeria* is given on p. 224, and on pp. 236 and 238 the occurrence of *C. edusa* and *D. lineata* is noted, and on p. 239 the great prevalence of crippled Lepidoptera in New Forest, in 1943, is commented on. The Ent. M. Mag. of December 1943, p. 279, records *C. edusa* for Hants. *A. lathomia* is recorded

from the Isle of Wight on 18th September in *Entomologist* of January, 1944, p. 9. An interesting list of first occurrences on the Hants-Surrey border is to be found in *Entomologist*, February 1944, p. 31.

Coleoptera (Beetles). A scolytid, *S. intricatus* Ratz., was found in a porch here on 18th March. (CA) noted both sexes of *G. typhaeus* on the heaths in March. On April 6th, *C. cinctella* was common in the garden. On 13th May, *Lacon murinus* was out in numbers. The rare *Agrilus viridis* was again present in numbers at midsummer amongst decaying *Salix*. On 11th August, *Aromia moschata* were emerging and frequenting *Angelica*. A male specimen, seen on 12th August, remained on almost the same spot for two or three weeks, apparently shifting for the night to the stalk below the flower table, and once to the next flower-head. On 5th September, *Notiophilus palustris* was found in a well, and *Pterostichus cupreus* was running in the sun. Not a single glow-worm, male or female, has been seen here this season. On 26th December, an Apion, sp.?, was in the house. (HL) saw *Lucanus cervus*, female, flying in the garden on 25th June. (FCF) records a vast number of *Sitones regensteinensis* feeding on Broom, on 17th February, in Bournemouth. He found *Carabus arvensis* on 2nd March, at Bournemouth, but failed to find *C. nitens*. *Adalia bipunctata* and *C. 7-punctata* were present on 3rd. A fine female of *Lytta vesicatoria*, taken last July at North Camp, is noted in *Entomologist*, January 1944, p. 14. I once met with it in great numbers on Ash between Wool and East Lulworth, in Dorset. *Amara continua* and *Geotrupes pyrenaicus* were common.

Diptera (Flies). Many *Calliphora* were about by 7th March; *Sciara* spp. were seen on *Salix* on 20th March. *Eristalis pertinax* was hovering freely on 27th. The small variety of *Bombylius major*, seen in Webb's Copse, was common on 16th April, when *Tabanus bisignatus* was seen. By 3rd May, *Bibio marci* had appeared in numbers; on 13th, *Empis tessellata* was very frequent, and *Tabanus bromius* was about; on 27th, *Leptis scolopacea* was out, and one was seen as the prey of *Empis tessellata* which was, also, seen preying on *Xanthogramma citrofasciatum*; *Physocephala nigra* was noted, on a buttercup, and *Merodon equestris*, chiefly var. *narcissi*, as usual, was appearing, and *Zylota segnis* was about. On 9th June, *Echinomyia grossa* was well in evidence. On 12th, *T. bromius* and *T. maculicornis* were in numbers. On 17th, *Xylota sylvarum* still seemed very scarce. On 27th, *Acrocera globulus* Pz. and the rare *Blaesoxipha gladiatrix* Pz. were taken by Dr. C. D. Day here. Amongst the many insects about, the tachinid, *Alophora hemiptera*, was present. *Heracleum giganteum* and *Oenanthe crocata* were very prolific. On 20th July, *Xanthogramma ornatum* and *Chrysotoxum festivum* were frequent. On 12th August, a curious conopid (as large as *Physocephala nigra*) was on *Angelica*: it was mainly black, with brown on the second abdominal segment, but it eluded the net. On 16th, an asilid was caught with an ant as prey. On 23rd, *Volucella inanis* was seen, but it was much rarer than last season, its host, *Vespa crabro*, being also scarce. On 12th October, *Sericomyia borealis* was still very abundant. On 26th an undetermined psychodid was on a window. (WHC) sent from Alton, on 18th September, *Ornithomyia avicularia*, found on an Owl: it is a parasite of many birds.

Hymenoptera (Sawflies, Gallflies, Ichneumon-flies, Ruby-tailed Flies, Ants, Bees and Wasps). On 26th February, a very small queen of *Bombus lucorum* was active in a greenhouse, here, on the sunny afternoon. An *Andrena*, male, probably *afzeliiella*, was seen on a post on 19th March. On 1st April, *Bombus hortorum* was seen here; on 10th, *Bombus terrestris* was seen also. On April 18th, several spring *Andrenas* were about at Appleslade. On 17th, *B. helferanus* was noted and *Andrena thoracica* had a burrow in the garden. Many *Chrysis ignita* were busy investigating holes in woodwork. On 25th, a small species of *Megachile* was observed, and an *Odynerus* sp. of medium size was basking in the garden. On 3rd May, two species of *Odynerus* were observed; one, the smallest specimen of the genus that I have ever seen, on a

window. On 13th, *Bombus helveranus* was common, and *Ephialtes tuberculatus* was seen. *O. parietinus* was prospecting for a nesting site in a room; on 15th, *Osmia rufa* was out, and on the 18th *B. lapidarius*, queen, was at work by its nest. On 18th, *C. ignita* was in great numbers and *Psithyrus vestalis*, female, was observed; on 19th, *O. rufa*, male, was basking on an outer door, and *V. vulgaris*, queen, was prospecting for a nest. Species of *Tenthredinidae* were numerous, and *Ephialtes tuberculatus* was numerous, inspecting dead wood, cut-down conifers and woodwork. *Bombus terrestris*, workers, were now appearing. *Bombus pratorum*, worker, and workers of other *Bombus* were getting very numerous on 20th, and a queen of *Vespa crabro* was out of hibernation in a house-room. On 24th, very fine *Bombus agrorum*, queens, were numerous, and on 27th *Ammophila campestris* was common. *Eucera longicornis*, males, were frequenting rhododendron flowers on 29th. *B. lapidarius*, queen, was seen on 6th June, and a queen of *Vespa crabro* appeared to be nesting in a roof on 8th. By the 22nd there appeared to be a fair sprinkling of queen Hornets about. A large number of *Crabro* spp., and other aculeates, were noted on *Heracleum*, and other plants, on 27th June and 2nd July. *Megachile*, *Osmia*, *Odynerus*, *Crabro* and other genera were present on 20th July, as were *Megachile* and *Osmia* conspicuously on 27th, but a great absence of wasps was noticed. The 31st of July and 1st of August were very hot and many swarms of 'winged ants' were over the district, but there were still very few wasps and only an occasional hornet. On August 9th, a selandriad was noticed hovering in a swarm over *Angelica* at evening. A great scarcity of ichneumonids and other insects was now noticed. On 16th August, *Chrysis ignita* was still about, but less numerous than earlier, or last year, yet several species of *Odynerus*, large and small, continue quite common. *Megachile centuncularis* was about outdoor woodwork, as were *Caelioxys* spp. on 20th. On 25th, a male *Mutilla europaea* was seen on a greenhouse, the females being common. *Andrena cetti* was seen on Scabious on 30th. On 1st September, specimens of *Allantus* were on *Angelica* quite late in the evening, evidently intending to spend the night on the flowers. On 4th, *Megachile* spp. were still about on woodwork. On 12th, a recrudescence of *C. ignita* in numbers was noticed, as also of *O. parietum* and other species of the genus. Do *Odynerus* spp. and its parasites *Chrysis* spp. have second broods? *Bombus agrorum* was still numerous on 18th. Wasps were almost non-existent. A chief cause of the scarcity of hibernating insects is a mild winter, or other cause, that disturbs them prematurely. I note that *Depressaria* spp., *Chrysopa carnea*, *V. io*, and *urticae*, if roused indoors by a hot room, are very often found dead a few days later. They have only a vital reserve to meet normal natural conditions. This rule would apply to species of wasp. A mild winter, too, spares the birds and makes them more destructive. Increase of such enemies, as Woodpeckers and Badgers, would affect survival in some districts as an occasional cause at least. (ERG) points out that the *Volucella* inquilines of *Vespa* do not seem to have suffered from the universal scarcity, indeed (HEA) writes that he had never known *V. inanis* so abundant. On 20th September, *B. agrorum* was still in numbers, fresh and worn, on Scabious, when many males of the genus *Ichneumon* were flying amongst the herbage and flowers. On 23rd, *B. helveranus* was also still numerous. Species of *Odynerus*, workers of *B. agrorum* and others, and a queen of *B. muscorum* were still flying on 11th October, and a worker of *B. muscorum* was seen on 13th. Ichneumonids were coming to light on 20th, and, on 24th, a great number of small Ichneumonidae, of unknown species, evaded capture.

(FCF) reported *B. lucorum*, on 28th February, on sallow at Bournemouth, and again on 1st March, with many hive bees. (HL) saw a *Bombus* sp. flying on 13th February, and a queen hornet in the garden on 14th May. (CA) tells me that a nest of *V. germanica*, examined, sheltered 330 queens, 50 workers and only three males, but it was very late in the season. All these were between the sections. 400 more queens were in the cells in various stages of development, and the whole lot of sections carried 10,900 cells. He says wasps have been very scarce at Fordingbridge, *V. sylvestris* having been the most numerous. Hornets were very plentiful. On 14th August, a large branch was cut off an

oak, and sap exuded. Scores of hornets came to the feast. They sat in a large circle, drinking with their heads all facing inwards. They were workers and could be seen in the dusk still flying round. On 24th August, a specimen of *Ichneumon lautatorius* Desv. was taken by him by Linwood Bog. It had been common here. (EFC) Leckford, says, "I saw a hornet, ? male, in my garden, the first since I came, eleven years ago. Queen wasps abounded in early spring, but very few nests resulted." (AH) Petersfield, writes, "We only saw one wasp, and that was in September."

A few species, among many more seen at Appleslade, not noted in the phenological lists, may be named here.

Lepidoptera. *Thecla W. album*, female, was taken on *Heracleum giganteum*, by the house, on 7th July, perhaps blown by a N.W. wind from Fordingbridge. Its food plant, Wych Elm, does not grow naturally here where it has not occurred before. It is rare in Hampshire. *Polia adusta*, *Hepialus sylvinus*; *Scopula ferrugalis*, *Nemotois minimella*, were observed. **Diptera.** *Thereva circumscripta*, *Dioctria baumhaueri*, *Laphria marginata*, *Eumerus strigatus*, *Ischyrosyrphus laternarius*, *Chilosia pulchripes*, *Orthoneura nobilis*, *Paralophora pusilla*, *Carcelia comata*, *Zophomyia temula*, *Tephromyia grisea*, *Servillia ursina*, *Macronychia polyodon*, *Hebecnema vespertina*, *Sapromyza fasciata*, appeared. **Hymenoptera** (*Sessiliventre*). *Tenthredo maculata* was common, and *Athala lineolata* swarmed. (*Evaniidae*): *Foenia assectator* was frequent. (*Braconidae*). *Spathius exarator* was plentiful. *Eubadizon flavipes* appeared. (*Ichneumonidae*). *Ichneumon gracilentus*, *I. stramentarius*, *Spilocryptus amoenus*, *Pimpla arundinator*, *Glypta parvicornuta*, *Syzeuctus maculatorius*, *Banchus volutatorius*, *Tryphon brunniventris*, *Exochus decoratus*, *Limnerium albidum*, were about. (*Chrysididae*). *Chrysis ignita* was abundant; *C. cyanea*, common. (*Heterogyna*). *Acanthomyops alienus*, plentiful. (*Fossores*). *Myrmica melanocephala*, *Mimesa shuckardi*, *Passaloecus monilicornis*; two specimens like *Crabro chrysostomus* but too small; *C. lituratus* appeared. (*Diptera*). *Vespa norwegica*, on 1st July, one male, on *Heracleum giganteum*, not common here; *Odynerus sinuatus*, common. (*Anthophila*). *Prosopis confusa*, *P. brevicornis*, *Megachile versicolor*, *Psithyrus barbutellus*.

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