

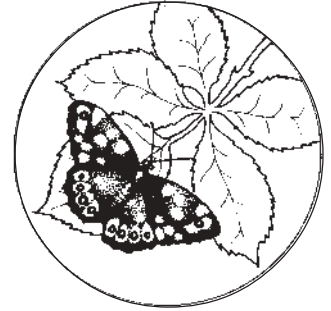
THE ESSEX FIELD CLUB

HEADQUARTERS:

THE PASSMORE EDWARDS MUSEUM,

ROMFORD ROAD, STRATFORD,

LONDON, E15 4LZ



NEWSLETTER NO. 6

April 1993

EDITORS NOTE

Thank you to Del Smith for his work as Editor of the Newsletter. He has handed editorship over to Peter Harvey and items for the Newsletter should therefore now be sent to Peter Harvey at 9 Kent Road, Grays, Essex, RM17 6DE.

Thank you also to those members who have responded to requests for items to the Newsletter. I would continue to ask members for contributions. There must be lots of interesting observations and information that would be worth sharing with other Field Club members.

The next Newsletter is planned for the end of July. Contributions should be with me by mid July please.

Peter Harvey

SPECIAL MEETINGS Nos. 1 & 2

The connection between the Essex Field Club and the Newham (Passmore Edwards) Museum was described by Jeremy Ison in Newsletter No. 3. The collections and library of the Field Club are housed in Museum premises. Included are important collections and long runs of many important journals.

There will be an opportunity for members to view these collections and the library at the Special Meeting on Saturday 8th May and there will be a guided tour and discussion of the work of the Museum at the Special Meeting in the evening on Wednesday 9th June. Please come along and help make these first meetings to the Museum a success.

The collections are not normally open to the public but may be consulted by members at other times by arrangement with Colin Plant, Assistant Curator at the Newham Museum (081-470 4525).

LARGER MOTHS OF THE LONDON AREA

This book on Macrolepidoptera was mentioned in Newsletter No. 4. It will shortly be published and the introductory offer by the London Natural History Society is included with this Newsletter.

AN UPDATE ON HORNETS IN ESSEX

Following my note on Hornets in Newsletter No. 4 I have had several interesting letters from members. But first a correction. I have examined carefully the three specimens that I actually collected in Dagnam Park on 17th October 1992 and in fact they are all males. It would seem that my statement that the specimens seen were queens is probably untrue and they were probably all males. I might have had more courage if I'd known at the time. Now to the letters.

Tony Walentowicz at Chelmsford Museum states that the species seems to be quite common in the Hylands Park area and amongst several other local records he states that that he observed a small hornets nest in a nest box at Galleywood on 19th September 1990.

Jeremy Ison sent me several records from the north of the county, two from 1992 and one as far back as 1980.

The Rev'd N.S. Cooper wrote in from Rivenhall to state that on the 1st September 1992 several workers were seen at Rivenhall School (grid ref. TL 828178) feeding on some pears dumped on a compost heap.

Peter Glassborrow wrote in to state that in the mid 1930's probably 1935 and 1937 in Church Lane, Loughton (TQ 4296) Hornets nested in a rotting tree in two separate years. And finally from Mrs J. Wallis of Greensted, Ongar the following fascinating letter which we reproduce in its entirety.

I have just been reading the Essex Field Club Newsletter, and was interested in your article on Hornets. We started farming here in 1937, and so far as I can remember Hornets were not an unusual sight. In the late 1940's and in the 1950's there seemed to be an increase in numbers - circa 1950 my young daughter knelt on one in her bed and received a nasty sting! Thereafter there seemed to be a decrease in numbers. A few years ago we noticed that butterflies were leaving a buddleia bush in a steady stream and coasting down the lane. On investigating their curious behaviour we found that on the back of each butterfly was a Hornet presumably flying them off to feed the larvae in a nest in a fallen tree. It was a strange sight - and one which we have never seen again. Since this time I have not been aware of any Hornets about until a month ago (November) when I found one battered specimen on a grapevine in the garden. However my son who lives nearby at Lodge Farm says he has noticed quite a few there in the last two years or so and feels numbers are building up again.

I am extremely grateful to everyone who replied. It was an excellent response and perhaps I can take this opportunity to urge all members to write in to the Newsletter Editor with any note of interest.

Del Smith

A FURTHER NOTE ON HORNETS IN ESSEX

I have been interested in the comments about Hornets in Essex in the last two Newsletters. I first saw Hornets in the early 1980's, in Hylands Park, at the North East end. It was in October during sunny weather and they were active around young trees. Bark was being removed but not taken away (from Ash trees). Perhaps at that time of year the sap is sweet.

No they don't attack you if you are quiet. I had one sitting in my hand! And I took a photograph!

I saw Hornets again on the visit to Marks Hall Woods in July 1992. The colony was in a new tree stump. I have a photograph.

Concerning other wildlife, I am at a loss to understand why no comment has been made about the large loss of wildlife which occurred in the thunderstorms which took place in Essex in the middle of last September. In the daily paper it was mentioned that rafts of dead birds were found! A later count was 3000 dead birds found on Foulness and the Crouch, also a dead cow and sheep. Hailstones were blamed.

A. M. Bunker

BOOK REVIEW: *Lepidoptera of north east Essex* by B. Goodey and J. Firmin, published by Colchester Natural History Society, 1992 @ £4.95.

This book runs to 109 pages tidily bound in paperback and is a very comprehensive list for such a local group to produce. It is very encouraging in these times of financial constraint to find that such a venture is supported by Colchester Borough Council.

It begins sensibly with a map of the area, rather unnaturally defined by 10Km grid squares, but that is no fault for which this publication is responsible. There is a foreword by A. M. Emmet, Introduction and historical notes which describe the notable lepidopterists who have worked the area. There are further introductory chapters on Wildlife & Conservation, The changing status of some species, The Bradwell light traps, and the two species added to the British list from the area: *Coleophora fuscicornis* Zell. and *Gortyna borelii* Pierr. each by their first captors. The 10Km squares comprising the area are briefly described with a census of species for each, but the total census for the area I did not find. The text is interspersed with eight pages of line drawings depicting selected species from the list, the scale varies within each such page but the wingspan of each is given in the legend; the artist is not identified but (s)he had nothing to be ashamed of!

Then follows the main section, the systematic list: Bradley & Fletcher's Log Book numbers are given, but the checklist followed is not stated. It appears to be the sequence of names used in A. M. Emmett's *The Scientific Names of the British Lepidoptera* with English names added for macrolepidoptera. Symbols are added to describe the frequency, and in most cases the distribution is given by means of a list of 10Km grid squares from which it is recorded.

The A4 format is not the most handy for references, and cross referencing with other works would be made much easier for some if a few synonyms were included. It is surprising when such attention is given to *G. borelii* that scarcely a mention is made of *Luperina nickerlii* Freyer. Although the local race has not as yet been named, it may be regarded by some as an endemic subspecies and the discovery of this taxon originated in the area covered and retains its headquarters there.

Despite these minor shortcomings the book contains a very impressive amount of data for such a small area, and this data is accurately recorded; it is very encouraging to find it made available to the public in this way. It is also clearly presented and without obvious misprints or other errors.

D. Agassiz

THE WILD SERVICE-TREE

Wild Service is one of our rarer native trees and is a strong indicator of ancient woodland. Its presence is frequently cited in attempts to prevent the destruction of ancient woods. e.g. in the well-known case of Oxleas Wood in the London Borough of Greenwich. It is widely distributed in Essex and is almost common in some areas.

Over the past year I have been investigating its distribution in the Braintree District, with the help of members of the Braintree Group of Essex Wildlife Trust. This has confirmed its strong association with ancient woodland though it does rarely occur in hedges, usually alongside green lanes. It is relatively common in some parts of the district but appears to be absent over large areas even though there is plenty of ancient woodland.

Wild Service in the Braintree District seems to be associated with boundaries between sands or gravels and clays, i.e. loess/chalky boulder clay, boulder clay/Kesgrave sands and gravels, Kesgrave sands and gravels/London clay. Its distribution coincides with that of Small-leaved Lime. However, it is also common in Epping Forest and the south-east Essex woods where Small-leaved Lime is absent.

I would be interested in following this up with investigating its occurrence elsewhere in the county, particularly in the extreme north west where it would seem to be rare (it is very rare in Cambridgeshire). I would also like to know why it almost always occurs on the same sites as Small-leaved Lime around Braintree, while Small-leaved Lime is absent from areas in the south of the county where Wild Service is common. If any members have information about Wild Service trees which would help me with this I would be grateful to hear from them.

Jeremy Ison, 14 Hadley Close, Bocking, Braintree, CM7 5LP.

ESSEX LACEWINGS AND THEIR ALLIES

AN INTRODUCTION AND APPEAL FOR RECORDS

INTRODUCTION

The lacewings are soft-bodied, holometabolous insects ranging in size from a few millimetres to around 10cms in length. The group includes the familiar green and brown lacewings (Chrysopidae and Hemerobiidae), waxflies (Coniopterygidae), ant-lions (Myrmeleontidae) Ascalaphids (Ascalaphidae), the giant lacewings (Osmylidae), spongeflies (Sisyridae) and others in the order Neuroptera, together with the alderflies (order Megaloptera) and the snakeflies (order Raphidioptera). Around 6000 species are represented world-wide, with 300 or so of these in Europe. Of these, 69 are recorded in Britain, though this total includes one which is certainly extinct and two more which are probably so. For Essex, there are records of 41 species. Together with the four British scorpionflies (Mecoptera), all of which are also recorded for Essex, the lacewings form a convenient group for study.

Identification, however, has been rather problematical to date. There has been no major review of the order since Frederick Killington's two-volume Ray Society Monograph in 1936 & 1937. This covered the Neuroptera only and is clearly rather out-of-date. The 1957 Royal Entomological Society Handbook by Lt. Col F.C. Fraser also included the other three orders but is plagued by a large number of errors and is quite unworkable by anyone who has no prior knowledge of the group. Some recent keys to selected "difficult" groups of lacewings have been produced; I shall mention these at the appropriate points in the text below. Of course, for German speaking entomologists, the 1980 two-volume tome by messrs. Aspöck, Aspöck and Hölzel is strongly recommended (see references, below).

ESSEX MEGALOPTERA - ALDERFLIES

Sialis lutaria - the common alderfly - is the only one of the three British species so far known to reside within the confines of the Essex boundary. It is probably a familiar sight for most naturalists, typically emerging from its aquatic stage during May, when literally thousands may be disturbed from reeds and other emergent vegetation on which they are resting whilst their wings harden and dry. Slow or stationary waters with oodles of ooze are required to support the insect (the scientific name is derived from the Latin lutum = mud). *Sialis fuliginosa* is unlikely to present in the county, though it should nevertheless be looked for alongside faster-flowing rivers. *S. nigripes* very possibly is present; it may have a preference for chalky areas. Identification of alderflies requires an examination of the genitalia (both sexes) and the reader is referred to the illustrations by Plant (1989).

ESSEX RAPHIPTERA - SNAKEFLIES

The oak-woodland dwelling *Phaeostigma notata* is traditionally supposed to be the commonest of the four British species, though in Essex it appears with equal frequency with *Subilla confinis* and *Xanthostigma xanthostigma*. Little seems certain about the larval requirements of the latter two species, though all three are predatory in the early stages and live under the bark of both fallen and standing dead timber. The adults are truly arboreal and are rarely recorded for this reason. I have had a reasonable success by standing on the deer-platforms on trees in some North Essex woodlands and beating the higher branches; alternatively, sweep-netting woodland-edge vegetation after very strong winds can pay dividends. The fourth species, *Atlantoraphidia maculicollis* is not recorded for Essex but is surely present. It is confined to pine trees and is very common on the ends of the lower branches of plantation pines in Hampshire and Surrey during bright morning sunshine in early May.

For identification, the recommended key is Barnard (1988) but records should usually be confirmed by examining male genitalia (see Plant, 1988).

ESSEX NEUROPTERA - TRUE LACEWINGS

The green lacewings are probably familiar to almost everybody, courtesy of our commonest species, *Chrysoperla carnea*, the only member of the group to hibernate as an adult. This habit leads it to enter houses. In warmer periods it breaks its hibernation and heads for the sunlight - usually to find the window closed! Thus, it is often found dead on window ledges.

But this is only one (actually, it is now considered to be a complex of four!) species in our largest group of lacewings. There are 16 other green lacewings, which may come as a surprise to some people, together with a large number of brown ones.

Green lacewings belong to the family Chrysopidae, a name which means "golden eyes". Look at one close up in good sunlight and you will see why. Nine species are recorded for Essex including *Cunctochrysa bellifontensis* added to the British list as recently as this year (Plant, 1993) and since then recorded from the moth traps on the roof of the museum store in East Ham and at Writtle Agricultural College. The larvae of all species are voracious predators of aphids and in eastern Europe are of considerable economic importance for this reason. The adults are equally aphidophagous but prior to egg laying may need to feed on pollen in order to gain sufficient sustenance. The white eggs are distinctive in that most species attach them to the plant surface by means of a long, thin stalk. Often these are laid singly, but other species lay groups of eggs. Another variation is that sometimes the stalks of each egg in a group are twisted together to form a single strand. The precise number of eggs in the group and the manner of attachment are important aids to identification of the parent species. Those species which do not employ the stalk method usually lay their eggs at the tips of the hairs of the plant. In many species the larvae adorn their bodies with dead plant and insect material as a form of camouflage

but, unfortunately, breeding through to the adult stage is the only reliable means of identification at present. A number of the adults have the defensive ability to produce an extremely foul-smelling fluid when handled; this can make use of the pooter a rather unpleasant activity at times!

Green lacewings should be identified using Barnard (1990c).

Most brown lacewings belong to the family Hemerobiidae. These include the large and very distinctive *Drepanopteryx phalaenoides* (not yet recorded for Essex), the small and usually flightless *Psectra diptera* and a host of LBJs (“little brown jobs”). All of the more frequent British species are recorded for Essex but there are a number of surprising absentees. In particular, three species, namely *Hemerobius simulans*, *H. atrifrons* and *Wesmaelius quadrifasciatus* are all associated with larch trees (*Larix* sp.), and are almost certainly undetected residents in Essex. Another prominent absentee is *Hemerobius marginatus* which is typically associated with birch trees (*Betula pubescens* and *B. pendula*). Many species are restricted to pine trees (*Pinus*) and their eggs can easily be spotted on aphid infested shoots of the trees. One British species, *Hemerobius fenestratus* is known from a single specimen taken in Kent (Plant and Barnard, 1988) and may represent a recent attempt at colonisation. It closely resembles *H. pini* and should be carefully searched for amongst pine plantations in Essex. One species *Wesmaelius mortoni* is now extinct in Britain and another *Hemerobius contumax* may have gone the same way, not having been recorded since 1952.

Barnard (1990a) provides an excellent key to the genera and Barnard (1990b) to species of *Wesmaelius*. For other adults the key in Fraser (1957) is usually workable, though excludes *H. fenestratus*. In view of the fact that other European species (eg., *Micromus lanosus* and *Hemerobius handschini*) may lurk undetected in south-east England the recommended text is that of Aspöck, Aspöck and Hölzel (1980). Since this latter work costs £230, readers may prefer to send specimens to me!

Spongeflies (family Sisyridae) complete the brown lacewings. The three British species are all parasitic, as larvae, on freshwater sponges, though in the entire British entomological literature I have only managed to find the names of two host sponges (*Spongilla lacustris* and *Ephydatia fluviatilis* - and these in relation to only to *Sisyra fuscata* our commonest spongefly and the only one recorded for Essex. For identification, use Elliot (1977).

The giant lacewing *Osmylus fulvicephalus* is the only British representative of the Osmylidae but it is not recorded from Essex (yet?).

Waxflies contain the smallest of the Neuroptera. They resemble the white-fly pests of indoor potted plants and are seldom more than 5mm across their open wings. Eleven species are reliably reported from Britain and all but one (*Aleuropteryx juniperi*) are recorded in Essex. When Fraser wrote his key in 1957, he recognised only seven species, one of which has now been discounted. The advances in the study of this family made in the last five years have allowed for the discovery of new species and of much new

information on those already known. Fraser regarded *Coniopteryx borealis* as being confined to two locations in Scotland. Recent realisation that examination of the male genitalia is vital for correct identification has shown this species to be the most widespread and numerous of all the Coniopterygidae in Britain, including Essex. Essex also boasts records of the newcomers to the British list, *Coniopteryx esbenpeterseni* and *C. lentiae* (both of which have evidently been with us as undetected residents for over 150 years) and *Semidalis pseudouncinata* a recent colonist associated with *Cupressus*, *Thuja* and possibly *Juniperus*.

Identification requires the examination of the internal genital apparatus of adult males. The only English language key available is Plant (1991a). This work excludes *Semidalis pseudouncinata*, for which, see Plant (1992).

ESSEX MECOPTERA - SCORPIONFLIES

Three scorpionflies and the snowflea make up the British species complement and all are recorded for Essex. The former take their name from the adult males, which possess a swollen genital capsule at the end of a slender body. This is typically held forwards over the body in a manner resembling a scorpion; they are, nevertheless, totally harmless and quite lacking in a sting. Two species *Panorpa communis* and *P. germanica* are both widespread and very common in Essex and are typically found in dense vegetation at the base of hedgerows or in woodland edge habitats. Brambles feature strongly in the reported associations. The third species, *Panorpa cognata* is apparently extremely rare over much of Britain, including Essex.

The snowflea *Boreus hyemalis* is practically unique amongst British insects in that it matures during the very depths of winter. Adults are in evidence from about November to March, and most numerous in December and January when they can be found "hopping" on snow-covered ground - a habit which gives them their colloquial name. They are hopelessly under-recorded but are not by any means confined to upland areas, as suggested by some earlier texts. Pitfall trapping is the most frequently recorded capture method in Britain and it is from such a trap that Peter Harvey made the only recent Essex record - from amongst Sphagnum in Epping Forest. Other spider-hunters, as well as beetle-people, should look out for this diminutive insect which may, at first glance, resemble a large froghopper.

Identification of males can be performed satisfactorily using Fraser's (1957) key; females require examination of the shape of the ovipositor and the only published key available is Plant (1991b).

Under-recorded, known from but a single recent record.

THE LACEWING RECORDING SCHEME

For those interested in taking up the study of lacewings there is a thriving recording scheme in operation which I organise through the Biological Records Centre at Monks Wood. The twice yearly Newsletter contains much useful information and the latest on identification. To join (free!) write to Brian Eversham, Biological Records Centre, Monks Wood, Abbots Ripton, Cambs. A Provisional Atlas showing the distribution of the British species was prepared nearly two years ago (and maps updated last autumn); it should appear this year, though I am at the mercy of Monks Wood staff and the Treasury Department! A lacewing workshop is being organised by the British Entomological and Natural History Society at their headquarters near Reading this autumn and I would be pleased to welcome EFC members there (please bring problem specimens if you have any). Meanwhile, I positively welcome specimens of lacewings from light-traps, pitfall-traps or any other source (including window ledges). I reply to all communications, but it helps considerably if you enclose and sae.

REFERENCES

- Aspöck, H., Aspöck, U. & Hölzel, H. 1980 Die Neuropteren Europas. Krefeld: Goeke & Evers.
- Barnard, P.C. 1988 The genus *Raphidia*. *Neuro News* 2: 4 - 5.
- Barnard, P.C. 1990a A revised key to the genera and subgenera of British Hemerobiidae. *Neuro News* 5: 3 - 5.
- Barnard, P.C. 1990b A revised key to the British species of *Wesmaelius*. *Neuro News* 6: 6 - 8.
- Barnard, P.C. 1990c A revised key to the British Chrysopidae. *Neuro News* 7: 14 - 17.
- Fraser, F.C. 1957 Mecoptera, Megaloptera and Neuroptera. Handbooks for the Identification of British Insects I (12 & 13). London: Royal Entomological Society.
- Killington, F.J. 1936 & 1937 A Monograph of the British Neuroptera. London: Ray Society.
- Plant, C.W. 1988 genitalia drawings of male Raphidioptera given in *Neuro News* 2: 7.
- Plant, C.W. 1989 Identifying alderflies (*Sialis* sp.). *Neuro News* 4: 4 - 5.
- Plant, C.W. 1991a An introduction to the British wax-flies (Neuroptera: Coniopterygidae) with a revised key to British species. [Presidential Address to the British Entomological and Natural History Society, read February 1991]. *British Journal of Entomology and Natural History* 4: 99 - 117.
- Plant, C.W. 1991b The separation of females of British species of *Panorpa* (Mecoptera: Panorpidae). *British Journal of Entomology and Natural History* 4: 157 - 162.
- Plant, C.W. 1992 *Semidalis pseudouncinata* Meinander, 1963 (Neuroptera: Coniopterygidae) new to Britain with a note on its separation from *S. aleyrodiformis* (Stephens). *Entomologist's Gazette* 43: 292 - 296.
- Plant, C.W. 1993 *Cunctochrysa bellifontensis* Leraut, 1988 (Neuroptera: Chrysopidae), new to Britain with a note on its identification. *Entomologist's Gazette* 44: 41 - 44.
- Plant, C.W. & Barnard, P.C. 1988 *Hemerobius fenestratus* Tjeder (Neuroptera: Hemerobiidae) new to Britain. *Entomologist's Gazette* 39: 292.

Colin W. Plant, Newham Museum Service, The Visitor Centre, East Ham Nature Reserve, Norman Road, London, E6 4HN

WHATS ON

ESSEX FIELD CLUB

MAY

- Sunday 2nd **General Meeting No. 1374.** Shoeburyness for General Natural History. Meet 10.00 am east of Coastguard Station. Car Park in Gunners Park. Leader Roger Payne. Phone: 0702 331817 for details.
- Saturday 8th **Special Meeting No. 1.** Guided tour of the Natural Sciences Collections and the Field Club Library. Meet at the Centre, East Ham Nature Reserve, St. Mary's Church, Norman Road, East Ham, E6. TQ 430828 at 10.30 am for an 11.00 am start. Please be PROMPT as no access is possible for late comers. Meeting should finish by 2.00 pm.
- Sunday 9th **Amphibians and Reptiles.** Recording Meeting. Contact David Scott for details. Phone: 0245 361475.
- Sunday 16th **Bird Group.** Fingringhoe Wick for Nightingales. Meet 11.00 am at Visitor Centre Car Park. TM 048193. Leader John Bath. Phone 0277 651890 for details.
- Saturday 22nd **Botany Group.** Woodland Plants in Nunty's Wood. Meet 11.00 am at Marks Hall Visitors Centre Car Park. TL 839251. Leader Jeremy Ison. Phone: 0376 345235.

JUNE

- Sunday 6th **Botany Group.** Exploring the New Additions to Epping Forest. Meet 11.00 am at the Conservation Centre High Beach. Leader Ken Adams. Phone: 081-508 7863.
- Wednesday 9th **Special Meeting No. 2.** Visit to the Newham (Passmore Edwards) Museum, Romford Road, Stratford E15 4LZ. Meet 7.30 pm at the Museum for a **guided** tour and a discussion of the work of the Museum **with the Curator**. Tea can be provided so it is essential that we know if you are coming. Please phone A. Boniface 0245 266316 **in advance** so that arrangements can be made.
- Sunday 13th **Bird Group.** Hylands Park, Widford followed by the group AGM. Meet 10.30 am at the Car Park. TL 681048. Leader John Bath. Phone: 0277 651890 for details.
- Sunday 20th **Botany Group.** Priors Wood and London Jock Wood (Possible sites for Wood Barley). Meet 11.00 am. Widdington Village Street. TL 538317. Leader Ken Adams. Phone: 081-508 7863.
- Saturday 26th **General Meeting No. 1375.** Woodland Plants in Broadfield and Belcher's Wood. Meet 11.00 am Road Corner on East Side of Wood. TL 813266. Leader Jeremy Ison. Phone: 0376 345235.

JULY

- Friday 2nd **Mammal Group.** Bat Roost Visit. Contact John Dobson for details. Phone: 0245 224408.
- Friday 9th **Mammal Group.** Bat Walk. Contact John Dobson for details. Phone: 0245 224408.
- Saturday 10th **General Meeting No. 1376.** General Natural History. Walk along River Roding. Meet 10.30 am. Lay-by off A414. TL 560041. Leader David Turner. Phone: 0245 267450 for details.
- Friday 16th **Bird Group.** Weald Country Park for an Evening Stroll. Meet 7.30 pm at Visitor Car Park. TQ 568940. Leader John Bath. Phone: 0277 651890.
- Sunday 18th **Botany Group.** River Stort. Meet 11.00 am. Twyford Lock. TL 494193. Leaders Tim Pyner and Shirley and Charles Watson. Phone: 0702 332425 for details.
- Saturday 24th **Botany Group.** Thrimley Lane and Bailey Hills. Meet 11.00 am in Farnham Village. TL 474248. Leader Ken Adams. Phone: 081-508 7863.

AUGUST

- Sunday 15th **Botany Group.** Strethall. Meet 10.30 am. Cross Roads at TL 490405. Leaders Shirley and Charles Watson. Phone: 0279 505309.