

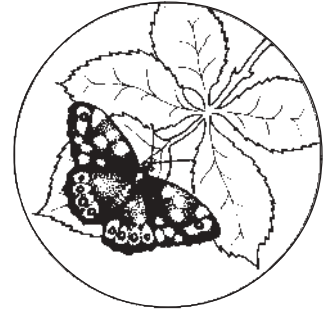
THE ESSEX FIELD CLUB

HEADQUARTERS:

THE PASSMORE EDWARDS MUSEUM,

ROMFORD ROAD, STRATFORD,

LONDON, E15 4LZ



NEWSLETTER NO. 9

January 1994

EDITOR'S NOTE

In this Newsletter there is an appeal for help in recording a site near Basildon to help provide information to prevent its development. So much wildlife habitat has been destroyed or drastically degraded in recent decades that we are often looking at small remnants of the wealth that there must have been for previous generations. Sites of interest are so often discovered too late to protect or with too little time to properly survey especially for their invertebrate interest. Even when sites are identified and given a measure of protection that is no sure prevention against their future destruction. Take Twyford Down, now only too notorious as one example of many where sites of national importance have been destroyed to make way for new roads, housing or retail developments and farming improvements.

One of the strengths of the Essex Field Club has been its contribution to the recording of the wildlife of the county. We have a distinguished panel of Recorders who receive and maintain records of the many groups of flora and fauna to be found in the county and a membership that includes many experienced naturalists and people with a keen interest in wildlife. I would add my plea to that of Phil Butler for as much active help as possible in recording the Basildon site this year.

CONTRIBUTIONS TO THE NEXT NEWSLETTER

Please send contributions for the next Newsletter, due out in early April, to the Editor, Mr Peter Harvey, 9 Kent Road, Grays, RM17 6DE by the last week of March.

A NEW WATERWEED IN ESSEX

We've had Canadian Pondweed, Azolla, Least Duckweed, Nuttal's Pondweed and *Crassula helmsii*, the curse from Australia. Now we have another North American invader, the Floating Pennywort, *Hydrocotyle ranunculoides*.

Floating Pennywort is usually a floating waterweed but it will also grow on wet mud and only in this habitat does it flower and set fruit. In its floating form it has fragile creeping stems with roots sprouting from the nodes. Any small fragments which break away can form separate colonies which is especially prone to happen in running water. It seems to be tolerant of frost and also shade, where its leaves grow even larger. It often occupies a niche not filled by any native higher plant; forming a carpet beneath reeds or tall rushes. It is capable of very rapid growth (about 20-30 cm per week) and it is already a serious pest in Central and South America.

Now, as to its appearance; its relationship to our native Marsh Pennywort (*Hydrocotyle vulgaris*) is obvious, it too has creeping stems and rounded leaves. Floating Pennywort is usually much larger, the leaf stems tend to be longer and in water the leaves float on the surface like miniature water lilies or more accurately, like a species of Water Crowfoot (*Ranunculus* sp.). In fact the leaves which are lobed, closely resemble those of a Water Crowfoot.

One doesn't have to look far to find the source of this alien invader. Look no further than your local garden or aquatics centre. It is readily on sale, often wrongly labelled as Marsh Pennywort. It was first noticed in the wild in the river Chelmer in Chelmsford by Martin Heywood in September 1990. It remained unidentified until Martin recognised the plant exhibited by Tim Pyner and myself at the Essex Field Club meeting in September 1991. This plant Tim and I had found in a flooded gravel pit known as Friar's Park in Shoeburyness. Later in 1991, Martin refound Floating Pennywort at its original site in Chelmsford and also further down stream in the Chelmer-Blackwater canal. During 1992, Tim Pyner and I found that it had spread at least as far as Ulting, 12kms downstream of Chelmsford along the canal.

Since 1992, several more records have surfaced and these are summarised below.

Benfleet Marsh, in a drainage ditch. S. Massey.

Shipwrights Wood, Benfleet, almost covering a small pond near playing fields. S.Massey.

Thorndon Park south, Brentwood, in the lake. J. F. Skinner.

Canvey Island, in Canvey lake.

Stanford-le-Hope, stream near housing estate.

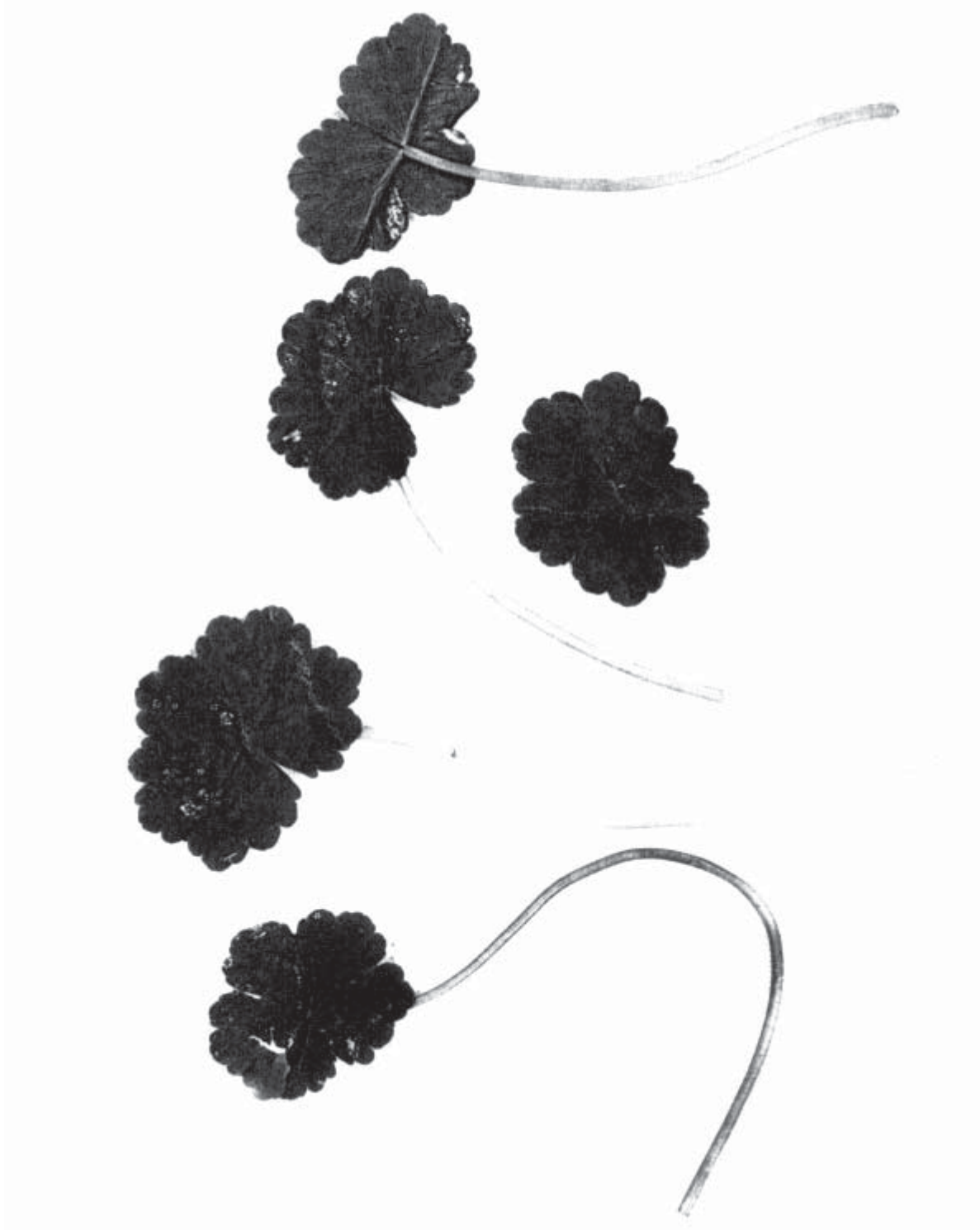
Basildon, Langdon Hills Country Park, pond in Willow Park together with *Crassula helmsii*, Azolla and the Brazilian pondweed, *Myriophyllum aquaticum*. R. G. Payne.

There is also a first record for Buckinghamshire at the edge of a balancing lake at Tongwell, Milton Keynes. R. Maycock and A. Woods.

Unless Floating Pennywort is knocked back by a severe winter (it shows no signs of suffering in cold spells) I can see this water plant being very common in a few years and potentially a serious pest.

As already mentioned, Floating Pennywort is a native of North America. It is found in ponds and swamps from eastern Pennsylvania to Florida and west as far as Texas. It is also found in Arkansas and along the Pacific coast from Oregon to Lower California. It has been introduced to Cuba, Central and South America and to Europe where it is found in Italy, Sardinia and Sicily. In Africa it has been recorded from Ethiopia.

R. G. Payne



Leaves of Floating Pennywort, photocopied from life (natural size).

WALTHAMSTOW MARSHES: A BRIEF POLLEN ANALYSIS

Although not strictly a feature that can be seen, sub-surface natural history allows us to peek at the past.

Below is a brief summary of part of a study looking at the past environmental change at Walthamstow Marshes, east London which was carried out last year as part of my thesis at the Guildhall University (formally City of London Polytechnic).

Remarkably this is the first time that pollen analysis has been applied at Walthamstow. I hope therefore that this synopsis will be of interest to readers and give my apologies to those already familiar to the background Quaternary history and for the brevity of account regarding vegetational change. The observed changes of lithology and the application of a pollen analysis at Walthamstow Marshes, combined with regional Quaternary histories to correlate and date underlying sediments, has provided evidence of environmental change over the past 9,000 yrs BP.

Channels were cut into the Lea Valley floodplain gravels as a result of complex glacio-eustatic variations at the end of the last ice age. A combination of the downwarping of regional crustal margins of the Thames basin combined with a series of marine transgressive/regressive phases led to the infilling of floodplains north and south of the river Thames with a series of post-glacial sediments, including the Lea Valley at Walthamstow (Although there are no direct saline conditions connected with the past rising of the river Thames, tidal 'ponding' of the river Lea did occur).

At Walthamstow marsh a 3.5 metre core was taken of mixed peats, sands and clays accumulating on the floodplain gravels of late glacial age. This was analysed for pollen remains in the laboratory. The analysis has provided a record of climatic and vegetational change from the early Boreal to Atlantic periods.

Evidence is shown of an ameliorating climate by tree assemblages. A gradual change from pioneer species, such as *Betula* (Birch), *Pinus* (Pine) and *Corylus* (Hazel) was slowly superseded by the expansion of thermophilous species such as *Quercus* (Oak) and *Tilia* (Lime). Of interest is the rapid rise in *Alnus* (Alder) seen in the Walthamstow pollen diagram. The rise is considered an important time/indicator horizon for pollen diagrams in southern England as the climate changed to wetter conditions around 7,000 BP. The chronology follows closely established vegetational changes recorded by other pollen analysis.

Molluscan remains found in association with the pollens provide further correlation. Considered as alien species, *Helix pomatia* (Roman snail) and *Helix aspersa* (Garden snail) have neolithic and post-Roman affinities.

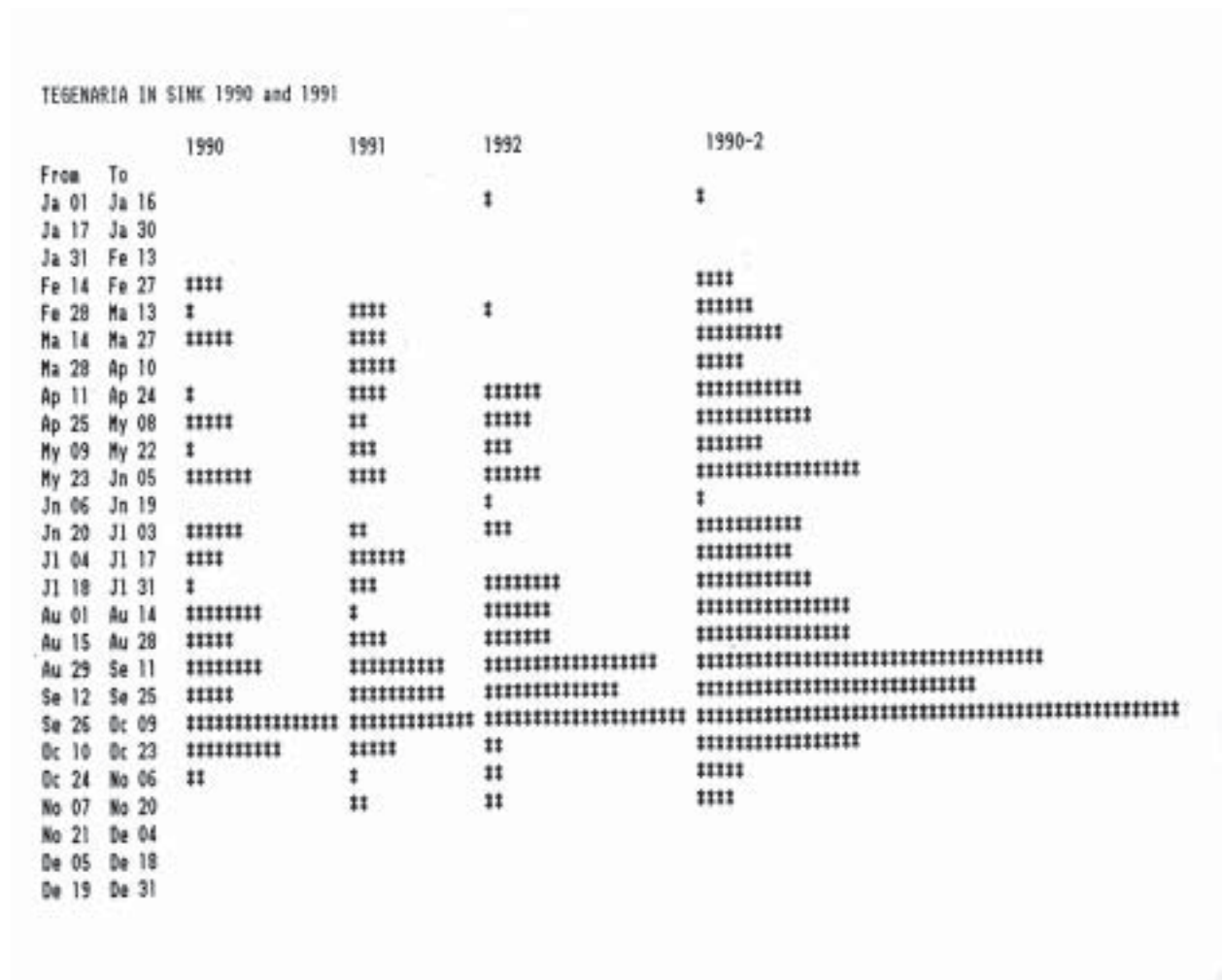
If anyone is interested, copies of the full pollen diagram can be made available, a SAE would be appreciated.

Alyn Pilkington, 11 Downs Ct., Amhurst Road, Hackney, London E8 1AT

RECORDS OF HOUSE SPIDERS *Tegenaria* spp.

Don Hunford has been keeping a record of the occurrence of *Tegenaria* house spiders falling into the sink in his house for several consecutive years. This has produced some very interesting numerical information that clearly shows two peaks, the biggest from late August through September and another less distinctive one around April and May. This would seem likely to be related to the main periods of maturity, when the adult males in particular must leave their webs and go wandering looking for females. The majority or all of these records are likely to refer to the species *Tegenaria gigantea* which seems to be the most widespread and abundant house spider in the county.

These two periods coincide with maturity periods common to a lot of other spiders. The largest number of species probably mature in the early summer period, but there are also many others that mature in late autumn and spring or early summer. A number of species even mature in the depths of the winter and must be sexually active in some of the coldest conditions.



RECORDERS NEEDED AT A NEW ESSEX RESERVE

In May I made contact with a group of residents campaigning for a local nature reserve on a former plotland adjoining Noak Bridge Village (TQ 699905). I had a slight acquaintance with this site having stopped there occasionally years ago to botanise on regular trips to and from Southend from Romford via the "scenic route". I knew that it then had a range of Essex flora but assumed that it had all been built over. I was surprised to discover that a large area remained and supported an exceptionally interesting fauna.

Briefly, after foiling attempts to drain a large marshy pond, the residents campaign resulted in the support of English Nature for a stage I survey. The Commission for New Towns engaged the Penny Anderson Consultancy in May 1993 and the site was subsequently recognised as a Site of Importance for Nature Conservation (SINC) at county level and of national importance for amphibians and reptiles. Surprisingly, apart from this recent activity there appears to have been little expert interest in the site.

The land is on the extreme fringe of the Basildon New Town area and although zoned for development the Commission for New Towns has agreed in principle to release land to EWT for a nature reserve. The boundaries are still under negotiation. The local group fear that these will be drawn too tightly to conserve the complete existing assemblage and that the important reptile and amphibian populations will be threatened by the loss of areas across which they disperse and return to hibernation sites. Part of this area is former grassland now almost totally scrubbed over but still producing orchid spikes in one small patch of light. Field ants survive nearby.

The main purpose of this brief report is to request help in recording the existing fauna to assist management planning, hopefully before decisions are taken which result in habitat loss and literally set reduced boundaries in concrete.

Expertise on flora, amphibians and reptiles is in place; several snake hibernation sites are known and monitoring is in hand. However the site is rich in virtually all orders and few are recorded at all. Most mammals occur, from badgers to bats. The site supports a good variety of wintering and breeding birds. In 1993 19 species of butterfly were identified. Dragon and Damselflies included the Emerald Damselfly *Lestes sponsa* and the Large Red Damselfly *Pyrrosoma nymphula*. Three species of bush cricket were noted including Roesel's *Metrioptera roeselii*. Invertebrates as a group are noticeably abundant and diverse, thriving in a variety of glades and rides within a mix of young oak woodland, scrub, and rough grassland. Service trees occur in several places and there are standing dead trees. Ground conditions vary progressively from very dry through marsh to open water and include a sandy area with a "heathy" character. Invertebrate recording was begun on a small scale last year and light trapping is planned for 1994, but a range of specialist input is desirable to build up a meaningful assessment.

Anyone able to offer assistance is requested to contact the Noak Bridge Conservation Group before initial visit via:- Betty Haynes, 185 Crouch St, Noak Bridge Village, Billericay, Essex (Tel: 0268 531365).

Phil Butler

The hoverfly *Psilota anthracina* in Essex

On the 24th May 1993 I collected a specimen of the rare hoverfly *Psilota anthracina* at the western edge of Mill Wood in Thorndon Park south Country Park. The edge of the wood here has a lot of Hawthorn and Blackthorn facing an arable field (growing a Rape crop) as well as a number of very old large oaks. The hoverfly has been taken in Essex twice before, at Dagnam Park in 1981 by Del Smith and at South Weald Park on the 27th May 1985 by Peter Kirby.

Psilota has a national status of Vulnerable (RDB2) and is known from a small number of sites in southern England. The New Forest and Windsor are its stronghold. Apparently the biology of the fly is unknown although the distribution suggests a possible link with dead wood. Adults have been recorded from April to June and characteristically visit the blossoms of hawthorn and sloe ("A review of the scarce and threatened flies of Great Britain Part 1", Falk 1991). If my memory serves me correctly I took this specimen flying around one of the large oak trunks between stretches of hawthorn and sloe.

Three weeks earlier I had taken two male *Criorhina floccosa* together with one male and two female *Criorhina asilica* (nationally Notable) all from the same edge of the wood. These hoverfly species are known to have a requirement for dead wood and it would seem that this woodland has an important dead wood fauna. I am grateful to Colin W. Plant for confirming the identity of the specimens.

Peter Harvey

WHATS ON: ESSEX FIELD CLUB

JANUARY

Sunday 30th **General Meeting No. 1382.** Hanningfield Reservoir for Wintering Birds. Meet 10.30am on causeway. TQ 723971. Leader John Bath. Phone: 0277 651890.

FEBRUARY

Saturday 19th **General Meeting No. 1383.** "Travels in the Rockies". Talk by Brian Eastcott at 3.00pm. Red Cross Hall, London Road, Chelmsford. (Car Park entrance in Writtle Road). Tea and biscuits provided.

Saturday 12th **Annual General Meeting No. 114.** Red Cross Hall, London Road, Chelmsford. (Car Park entrance in Writtle Road) at 3.00pm followed by Presidential Address "The Wild Service Tree". Tea and biscuits provided.

Sunday 13th **Bird Group.** Cudmore Grove Country Park. Meet 11.00am at Visitor Centre Car Park. TM 065147. Leader John Bath. Phone: 0277 651890.

ESSEX FIELD CLUB PUBLICATIONS

The following publications are still available from Essex Field Club (Publications), Mark Hanson, 28 Sylvan Road, Forest Gate, London E7 8BN.

All titles are available to individuals on a cash with order basis. Please add 50p towards postage and packing irrespective of the size of the order.

THE ESSEX NATURALIST SERIES

- No. 1. **Deer of Essex** by Dr Donald Chapman.
A 50 page paperback describing the distribution and history of deer in Essex. Photographs, maps, etc. ISBN 0 905637 06 2 (published 1977) PRICE £2.00
- No. 3. **Tiptree Heath - its history and natural history** by Laurie Forsyth.
19 page booklet describing the most important heathland habitat in Essex. ISBN 0 905637 08 9 (published 1978) PRICE 60p.
- No. 4. **The Wildlife of Epping Forest** edited by Dr David Corke.
60 page paperback with photographs and line illustrations. A review of the animal life of the Forest by the leading experts on each group of animals. ISBN 0 905637 09 7 (published 1979) PRICE £1.50
- No. 5. **The Essex Field Club - the first 100 years** by L. S. Harley.
21 page booklet describing the history of the Club on the occasion of its centenary. Photographs. ISBN 0 905637 10 0 (published 1980) PRICE £1.00
- No. 6. **The Smaller Moths of Essex** by A. M. Emmet.
The most detailed account of the smaller moths ever published for any British county. Distribution maps and details of over 1000 species. Illustrations of representative moths in each major group. ISBN 0 905637 11 9 (published 1981) PRICE £5.00 (reduced from £7.00).
- No. 7. **Lords Bushes** by M. W. Hanson.
The history and ecology of an Epping Forest woodland. 69 page paperback with 8 pages of photographs and additional line drawings. ISBN 0 905637 12 7 (published 1983) PRICE £3.00
- No. 8. **The Larger Moths and Butterflies of Essex** by A. M. Emmet and G. A. Pyman.
The companion volume to No. 6. Distribution maps for every species and a complete analysis of the changing butterfly and moth fauna of Essex. ISBN 0 905637 13 5 (published 1985) PRICE £6.00 (reduced from £9.00).
- No. 9. **The Dragonflies of Essex** by Dr Edward Benton.
A very comprehensive and readable account of the county dragonfly fauna. It includes the results of a recent county-wide survey and much historical information. ISBN 0 905637 14 3 (published 1988) PRICE £5.95
- No. 10. **Essex Elm** by M. W. Hanson.
Elms were devastated by Dutch Elm disease. In this booklet Mark Hanson examines the role of elms in the landscape and their uses, and also gives an up-to-date account of their status in Essex today. 87 pages, 19 photographs, maps and illustrations. ISBN 0 905637 15 1 (published 1990) PRICE £3.95
- No. 11. **Epping Forest - through the eye of the naturalist** edited by M. W. Hanson.
A book chronicling the complex land-use history of Essex's most famous Forest with modern accounts of its flora and fauna. ISBN 0 905637 16 X (published 1992) PRICE £10

OTHER

The Clay Tobacco-pipe in Britain by L. S. Harley. 51 page paperback covering the history and identification of these pipes. Special attention is given to pipes made in Essex and East Anglia. ISBN 0 905637 00 3 (second edition 1976) PRICE £2.50.

SPECIAL OFFER

Volume 6 (The Smaller Moths) and Volume 8 (The Larger Moths and Butterflies) are available together for £9.00 post free.