

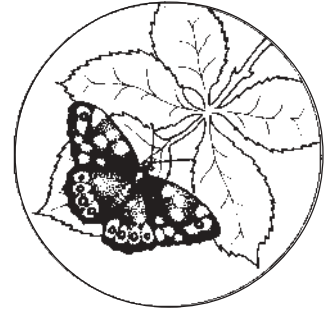
THE ESSEX FIELD CLUB

HEADQUARTERS:

THE PASSMORE EDWARDS MUSEUM,

ROMFORD ROAD, STRATFORD,

LONDON, E15 4LZ



NEWSLETTER NO. 12

December 1994

ESSEX FIELD CLUB EPPING FOREST MUSEUM AND TAXONOMIC WORKSHOP

At its meeting on the 14th November the City of London Epping Forest & Open Spaces Committee expressed a very strong interest in becoming involved in the most effective way in safeguarding the Field Club's former collections. How best to be involved has still to be decided, and no specific decision has yet been made. The committee has however asked to be provided with costs of various options and will meet to consider the matter further on January 6th.

If by one means or another a new museum comes about, it would become the Club's new headquarters and we hope it would provide a wide range of facilities for its members, including a meeting room/taxonomic workshop. To equip this workshop the club is planning to apply for a separate grant, and we need the advice of members, and especially our recorders, to compile the shopping list. It is our intention that the workshop facilities will also be available to associated learned natural history societies, and again we would like to hear from any societies in the London/Essex area who would be interested in participating.

The proposed workshop facilities fall into three categories. We would like to acquire as complete a set as we can of the latest identification guides to relevant groups of organisms in the county. To do this effectively would mean for example buying well over £3000 worth of modern mycological monographs and regional European fungus floras. Secondly, we want to provide a sophisticated computing facility linked to both a GIS (Geographical Information System) and GPS (Geographical Positioning System). GIS would enable us to have complete sets of O.S. maps in digital form so that we can store site information superimposed upon them, and so that we can superimpose landuse, soil or geological information on our distribution maps. The GPS system, (already in use at the Warren) would enable us to pinpoint the location of sites anywhere in the county. In addition we hope to have high resolution b/w and colour printers, a scanner and reader, together with associated software so that we can desktop compile all newsletters, the Essex Naturalist and other publications, print out high quality distribution maps, and maintain copies of our records in central computer files that can be handed down to the next generation of recorders.

Thirdly, we would like to offer members a complete range of recording and preservation facilities. These would include a colour photography stand and large format camera for photographing specimens in house, microscopes, including one with camera attachment, plant presses, mounting and drying paper, central supplies of insect pins, setting boards, drying equipment for fungi, pickling materials and vials for soft materials, etc. On members days say once a month, members would be able to bring in their specimens record and preserve them and deposit them in with the existing collection.

So, whilst there is still a long way to go in safeguarding the Club's former collections and there is no certainty that a new museum can be provided, please let us have your ideas for shopping lists for the three categories.

Ken Adams. President.

A REPORT ON FERRY FIELDS, TILBURY

Ferry Fields are an extensive area of grazing marsh grassland south of the railway line between Tilbury docks and Tilbury Fort. The site is yet another threatened area in the county of great wildlife value. Virtually the whole area has been identified in the Draft Thurrock Borough Local Plan as Employment land for New Development in Primary Areas, despite its recognition by the Essex Wildlife Trust as a Site of Importance for Nature Conservation in the county. The Local Plan has already been on deposit and preparations are taking place now for a Pre-Inquiry Meeting on the 19th December 1994 and the Public Local Inquiry starts on the 7th March 1995.

The site consists of unimproved grassland grazed by horses and sometimes by cattle. There are a number of dykes that may be of importance for their aquatic fauna. A public footpath crosses the site from near Tilbury Riverside Station north to the main railway line and south Tilbury. The flora is clearly quite rich, but I do not know if a detailed survey of this exists. I started to look at the area this year but was very unlucky with initial visits I made before August. Each time the weather was very windy and I had little success looking for hymenoptera, my main target group. However in August I made a number of visits that immediately demonstrated the importance of the site for invertebrates.

My list includes a number of excellent invertebrate records: the Nationally Scarce large robber fly *Asilus crabroniformis* is fairly numerous at the site, resting on cow or horse dung. The larvae are believed to be predatory on the larvae of dung beetles (and therefore the species needs the continued presence of grazing cattle or horses). It was thought to be extinct in Essex until it was found at the nearby Broom Hill site in 1992 by Roger Payne. I have also found it on the land to the east of the Tilbury power station but these 3 sites are all within a small area. In August this year I also found the species in small numbers at Eastbrookend, Dagenham Chase where there is an important area of horse-grazed grassland in the Dagenham corridor.

The Nationally Rare (RDB3) aculeate wasp *Passaloecus clypealis* (confirmed by G. Else) was taken along a Phragmites ditch on the western side of the site. It is known from only about a dozen sites in East Anglia and south-east England including Benfleet and Higham in the Thames marshes. It is thought to require wetland sites of high quality.

A reasonable number of the Nationally Scarce bumble bee *Bombus sylvarum* were found foraging at Red Bartsia. This is a local and much declined species that is recorded from the Thames Estuary but the only other site I have found it in Essex is at the Wat Tyler Country Park at Pitsea (determined by the late John Felton). I also saw what I believe was this species at Fobbing Marshes in August this year. Ted Benton informs me that these appear to be the only records for Essex in more than 10 years.

Other Nationally Scarce species recorded are the bees *Hylaeus cornutus*, *Lasioglossum malachurum*, *Melitta tricincta* and *Spechodes reticulatus*, the hoverflies *Cheilosia velutina* and *Volucella inanis* and also Roesel's bush cricket.

FERRY FIELDS LIST.

Spider hunting wasps

Priocnemis exaltata
other spp. indet.

Chrysid wasps

Chrysis cyanea

| | | | |
|------|------------------------------------|---|--------------------------------------|
| | Wasps | | Therevid flies |
| | Superfamily Scoloidea | | <i>Thereva nobilitata</i> |
| | <i>Tiphia femorata</i> | | |
| | Superfamily Vespoidea | | Stratiomyid flies |
| | <i>Dolichovespula sylvestris</i> | | <i>Microchrysa flavicornis</i> |
| | <i>Vespula germanica</i> | | |
| | <i>Vespula vulgaris</i> | | Syrphid flies |
| | Superfamily Sphecoidea | N | <i>Cheilosia impressa</i> |
| | <i>Cerceris arenaria</i> | | <i>Cheilosia proxima</i> (species D) |
| | <i>Ectemnius continuus</i> | | <i>Cheilosia velutina</i> |
| | <i>Ectemnius dives</i> | | <i>Chrysotoxum bicinctum</i> |
| RDB3 | <i>Passaloecus clypealis</i> | | <i>Chrysotoxum verralli</i> |
| | <i>Pemphredon lethifer</i> | | <i>Eristalinus aeneus</i> |
| | <i>Trypoxylon clavicerum</i> | | <i>Eristalis sepulchralis</i> |
| | Apidae (bees) | | <i>Eristalis arbustorum</i> |
| | <i>Andrena flavipes</i> | | <i>Eristalis intricarius</i> |
| | <i>Andrena minutula</i> | | <i>Eristalis nemorum</i> |
| | <i>Andrena scotica</i> | | <i>Eristalis tenax</i> |
| | <i>Bombus hortorum</i> | | <i>Eumerus strigatus</i> |
| | <i>Bombus humilis</i> | | <i>Eumerus tuberculatus</i> |
| | <i>Bombus lapidarius</i> | | <i>Helophilus pendulus</i> |
| | <i>Bombus pascuorum</i> | | <i>Helophilus trivittatus</i> |
| Nb | <i>Bombus sylvarum</i> | | <i>Melanostoma mellinum</i> |
| | <i>Bombus terrestris</i> | | <i>Myathropa florea</i> |
| | <i>Coelioxys inermis</i> | | <i>Pipizella varipes</i> |
| | <i>Colletes fodiens</i> | N | <i>Sphaerophoria scripta</i> |
| | <i>Epeolus variegatus</i> | | <i>Syritta pipiens</i> |
| | <i>Halictus tumulorum</i> | | <i>Syrphus balteatus</i> |
| | <i>Halictus rubicundus</i> | | <i>Volucella inanis</i> |
| | <i>Hylaeus annularis</i> | | Lepidoptera |
| Na | <i>Hylaeus cornutus</i> | | Small Tortoiseshell |
| | <i>Hylaeus hyalinatus</i> | | Large White |
| | <i>Lasioglossum leucozonium</i> | | Small White |
| Nb | <i>Lasioglossum malachurum</i> | | Common Blue |
| | <i>Lasioglossum morio</i> | | Brown Argus |
| | <i>Lasioglossum smeathmanellum</i> | | Gatekeeper |
| | <i>Megachile centuncularis</i> | | Meadow Brown |
| | <i>Megachile ligniseca</i> | | Small Heath |
| | <i>Megachile versicolor</i> | | Orthoptera (grasshoppers/crickets) |
| Nb | <i>Melitta tricincta</i> | | <i>Metrioptera roeselii</i> |
| | <i>Psithyrus vestalis</i> | | <i>Chorthippus brunneus</i> |
| | <i>Sphecodes ephippius</i> | | <i>Chorthippus parallelus</i> |
| | <i>Sphecodes puncticeps</i> | | |
| Na | <i>Sphecodes reticulatus</i> | | Arachnida (spiders) |
| | Diptera | | <i>Pachygnatha degeeri</i> |
| | Conopid flies | | <i>Walckenaeria antica</i> |
| | <i>Conops ceriaeformis</i> | | <i>Dicymbium nigrum brevisetosum</i> |
| | <i>Conops quadrifasciatus</i> | | <i>Oedothorax fuscus</i> |
| | <i>Physocephala rufipes</i> | | <i>Oedothorax retusus</i> |
| | Asilid flies | | <i>Troxochrus scabriculus</i> |
| N | <i>Asilus crabroniformis</i> | | <i>Erigone atra</i> |
| | <i>Epitriptus cingulatus</i> | | <i>Centromerita bicolor</i> |
| | | | <i>Bathyphantes gracilis</i> |
| | | | <i>Diplostyla concolor</i> |
| | | | <i>Lepthyphantes tenuis</i> |
| | | | <i>Neriene clathrata</i> |

THE OLD WATER WORKS SITE AT SANDFORD MILL
AN UPDATED LIST OF BRYOPHYTES

Bryophytes (Mosses)

- | | |
|--------------------------------------|--------------------------------|
| <i>Amblystegium humile</i> | <i>Eurynchium swartzii</i> |
| <i>Amblystegium riparium</i> | * <i>Eurynchium striatum</i> |
| <i>Amblystegium serpens</i> | <i>Grimmia pulvinata</i> |
| * <i>Campylium elodes</i> | <i>Schistidium apocarpum</i> |
| * <i>Drepanocladus aduncus</i> | <i>Fontinalis antipyretica</i> |
| <i>Cratoneuron filicinum</i> | <i>Orthotrichum diaphanum</i> |
| <i>Bryum argenteum var argenteum</i> | <i>Orthotrichum cupulatum</i> |
| <i>Bryum argenteum var lanatum</i> | <i>Barbula convoluta</i> |
| <i>Bryum bicolor</i> | <i>Barbula unguiculata</i> |
| <i>Bryum capillare</i> | <i>Barbula vinealis</i> |
| * <i>Bryum caespiticium</i> | <i>Barbula cylindrica</i> |
| <i>Bryum pallescens</i> | * <i>Barbula tophacea</i> |
| <i>Tortula muralis</i> | <i>Barbula trifaria</i> |
| <i>Tortula intermedia</i> | <i>Barbula hornschuchiana</i> |
| <i>Tortula ruralis</i> | * <i>Dicranella varia</i> |
| <i>Tortula latifolia</i> | * <i>Leptobryum pyriforme</i> |
| <i>Brachythecium albicans</i> | <i>Ceratodon purpureus</i> |
| <i>Brachythecium rutabulum</i> | <i>Hypnum cupressiforme</i> |
| <i>Brachythecium mildeanum</i> | |
| * <i>Climacium dendroides</i> | Bryophytes (Liverworts) |
| <i>Calliergon cuspidatum</i> | |
| <i>Rhynchostegium confertum</i> | * <i>Aneura pinguis</i> |
| <i>Eurynchium praelongum</i> | |
| | * Found in lime-rich areas |

Tim Pyner

A SHOCKING TALE OF ANTS

The Black Ant, *Lasius niger*, is a frequent pest of houses, usually finding a way into houses from outside. It is our most common garden ant and is particularly fond of building nests beneath paving stones which often abut the walls of houses. I have had an ant problem in my kitchen for some years now, especially during warm weather in the summer when they forage for food on work tops. This year I noticed that a great many seemed extremely interested in the plug attached to my electric toaster and I saw much to and froing of ants into the plug through the gap where wires enter.

At the end of the summer, my toaster packed up and I replaced it. On examination, the plug was found to be jammed solid with dead ants, all workers, actually numbering 429 in all. Nowhere in the literature have I read anything about the effects of electrical or magnetic fields on ants. Something, I am sure, was attracting the ants to the plug, could it be the electric field? I would welcome any comments and similar observations.

R. G. Payne

PLANT GALLS

Several members of the Field Club met at Epping Forest Conservation Centre on Sunday 7th August for a joint meeting with members of the British Plant Gall Society, led by Jerry Bowdrey of Colchester Museum and Brian Spooner of Kew. I am not sure of the final total, but it must have been in the region of 40 species for the Forest area.

It is always pleasing to get into the countryside on one of one's pet themes, and this day was no exception; good weather, good company and much of interest, including some tasty blackberries! (A report on this meeting by Jerry Bowdrey and Brian Spooner appears later in this Newsletter - Editor)

As I understand the distinction, plant galls arise from the interference by animal, plant or bacterial life on the growth of a plant, producing distortion from the normal growth, and not to be confused with wind damage, nor rubbing by animals, strictly not caused by mechanical means.

For a field trip, there has to be restriction on what can be discovered, here, visual searching of leaf, stem, shoot, inflorescence being the general locations, those organisms causing damage to roots require much more detailed searching.

A simple to use handbook was provided by Blandford Press with their "Pocket Encyclopaedia of Plant Galls in Colour", by Arnold Darlington and M.J.D. Hiron. The revised edition was produced in 1975, but it is difficult to obtain from the second-hand shops. Richmond Publishing produced "Plant Galls" by Margaret Redfern and R.R. Askew as No. 17 in their Naturalists' Handbooks series, which I find a little more difficult to use, though the illustrations are splendid. The British Plant Gall Society's "Provisional Keys to British Plant Galls" edited by F.B. Stubbs, is still obtainable at (I believe) £5, and is very useful. For those wishing to involve themselves deeply, there are a number of other books, most of which are difficult to obtain, however, a new book should come on the market shortly, priced at about £70 - I have not yet felt interested enough to remember the details!!

As is widely known, the oaks - *Quercus robur* and *Q. petraea* - are rich in the numbers of invertebrates that they support, galls too find homes in these species, many caused by cynipid wasps, some by midges. One to look for is the currant gall on the male catkins, caused by the cynipid *Neuroterus quercus-baccarum* in the bisexual generation, this gall also occurs on young foliage. The agamic generation forms the common spangle gall on the underside of mature leaves.

Other galls on oak include the oak marble, at one time used in the production of ink and dyes; another is the oak apple, a spongy mass on buds which in the agamic generation forms brown lumpy tissues on roots as a result of oviposition - later the wingless females migrate to the leaf buds where they lay parthenogenetic eggs, which cause development into oak apples.

Many galls are quite distinctive and easily identified. Amongst these are the agamic gall of acorns, *Andriscus quercus-calicis*, the "Knopper gall"; the reddish "bean gall" of the sawfly *Pontania proxima* on willow leaves, where the oval shaped galls may occur in fairly large numbers or only singly. Another is the spiral gall of Lombardy poplar leaf petioles caused by the aphid *Pemphigus spirothecae*.

A further dimension to the study of galls is the rearing of caterpillars through to the adult insects, for example, the midge *Urophora cardui* from the globular stem-swelling of the thistle *Cirsium arvense*. Some galls causers have inquilines, other animals which live in the homes the causers make, and feed on the same food as the causers use. A further complication arises from the predators which associate with some causers, mites of the family Eriophyidae are sometimes preyed upon by mites of the family Erinea.

Galls are not necessarily just interesting phenomena, they can have a severe commercial impact as well. Big bud of black currant and hazel, and the causers which feed on the fruits of oak; also those which cause stunting and deformation of edible fruit trees and other timber or ornamental trees, such as Artichoke gall *Taxomyia taxi* on yew *Taxus baccata*, the rust *Gymnosporangium sabinae* on pears (which inhibits development of the crop due to premature leaf fall) and the gall midge *Lestodiplosis pyri* which lays eggs in the flower buds where the larvae feed. The rust *Gymnosporangium juniperi* is known to sometimes affect apples, whilst American blight (the woolly aphid *Erisoma lanigerum*) can cause terrible damage in an apple orchard. A disastrous pest of potatoes is the fungus *Synchytrium endobioticum* which gives rise to black scab or potato cancer. There are, of course, many others.

All records will be welcomed by Jerry Bowdrey, Assistant Curator - Natural History, Museum Resource Centre, 14 Ryegate Road, Colchester C01 1YG. Voucher specimens should be sent with field data, for preference, until one's skill is beyond doubt, or it is something quite common. Anything unusual should always be sent for confirmation.

Ken Hill

AN ESSEX ANT-LION

Ant-lions can be spectacular insects resembling giant lacewings, to which they are related. Although one species has recently reputedly been discovered in Suffolk there are apparently no native species in Britain.

However, a very large ant-lion, in very good condition, but dead, arrived on my desk in Southend Museum in June. It had been found sandwiched in bubble-wrap packaging around grapes from India. I have had lots of cockroaches, spiders, a few beetles and grasshoppers, and even a lizard arrived with foreign fruit, but this was my first ant-lion. Somewhat resembling a dragonfly with large brown-spotted wings and clubbed antennae it was most impressive when set.

It was identified by Steven Brookes at the Natural History Museum as *Stenares improbus* Walker, and as the museum has within its collections only half a dozen old specimens the Essex ant-lion has been added to the collection.

R. G. Payne

TWO LARGE FOREIGN SPIDERS IN SOUTHEND

For some years now Southend has been the only locality in Essex for the large and impressive, *Steatoda nobilis*, a close relative of the more common *Steatoda bipunctata* but considerably larger. This colony is presently known only from my house and garden, but is almost certainly found elsewhere in the area. They are fond of sash windows, the gaps between drain-pipes and brick walls, and on the ivy covered wall at the bottom of my garden. The females never seem to leave their large, messy "platform" webs, but the males with their black and white bodies and reddish legs, obviously wonder widely as they often fall into the bath. This spider is known to bite if provoked and can produce severe inflammation in some people. It is thought to have originated from south-western Europe, Madeira or the Canaries. In Britain it seems to be restricted to southern ports. In Southend, the proximity of the former banana warehouse may not be coincidental.

It now appears that Southend is the home to yet another large foreign spider, as on the 15th October this year a large spider was brought to the museum by a man who told me that it had been crawling on his bedroom wall. When he tried to capture it, it leapt onto the bed and bit his girlfriend who was sitting there. Looking at the huge "jaws" of this spider, I could well believe it, even when he told me it drew blood. The spider was identified as *Segestria florentina*, one of the largest spiders found in Britain. Black in colour and quite hairy, it has large and impressive "jaws" or chelicerae which are of a shining bottle-green colour. Bristowe in his new naturalist book "The World of Spiders" goes to some length in describing his search for this spider which was then regarded as extremely rare in Britain. It now seems to be established in quite a few coastal towns to which Southend can now be added. As Bristowe explains, spiders of this genus are well adapted to a life in narrow tunnels, and it seems that *Segestria florentina* normally lives in crevices in brick walls. The spider spins a silk tube inside the hole. From the rim of the hole a dozen or so stout threads stretch outwards and act as fishing lines. There is an excellent illustration of this in Bristowe's book on page 112. As Bristowe so graphically describes, she emerges with lightning speed with flashing green jaws, biting fiercely then backing into her tube all in the space of about 2 seconds!

Segestria florentina seems to be a species which is particularly suited to a man-made environment and is now found in many parts of the world including Argentina and Australia. Its original home is thought to be the Mediterranean.

R. G. Payne

THE FOUR SEASONS RECORDING PROJECT

The Backwarden Reserve TL782039
Danbury Common TL782045

At the time of publication three of the four meetings have been held.

April 24th 1994

Aquatic invertebrates in the Backwarden Reserve

Deep Pools

Notonecta glauca (Greater water boatman)
Cloeon dipterum (Mayfly nymph)
Dytiscus marginalis (Great diving beetle)
Aeshna cyanea (Southern hawker dragonfly nymph)
Asellus aquaticus (Freshwater hoglouse)
Family Chaeboridae
Chaeborus sp. (Phantom larvae and pupae)

Sphagnum Bog Pond

Acilius sulcatus (a water beetle)
Planorbis corneus (Great ramshorn snail)
Daphnia pulex (water flea)
Family Chaeboridae
Chaeborus sp. (Phantom larvae and pupae)

Invertebrates were collected and identified by Tony Boniface. The range of species was disappointing.

Reptiles and Amphibians in the Backwarden Reserve

These were recorded by David Scott

The sunny morning encouraged the Adders to show themselves, and six were seen in the Relic Heath and Heather Valley areas, with one Grass snake at the latter location. No Common lizards were seen, but are known to occur on the reserve, as are Slow worms occasionally. The warden Mr Peter Nightingale reported an increase in Adder, Grass snake and Common lizard populations over the last three years. This was thought to be a direct result of the heathland conservation project now in operation.

On the amphibian scene one Common toad was found under a log in the heath area. Both Common frog and toad are known to breed within the reserve. The Sphagnum Bog Pool produced one female Smooth newt with a male of the same species in the Deep Pool. This deeper water also had Great crested newts and one pair was recorded, a "first" for this reserve for this protected species. No Palmate newts were seen but they could well occur as they are often found in gravel ponds.

David Scott

August 6th 1994

Higher Plants on Danbury Common

The plants in the north eastern area of the common starting from the main car park and extending to the eastern boundary stream were recorded by Tony Boniface. Ninety one species were identified and a further four were added on the 8th August 1994.

| | |
|---|--|
| <i>Acer pseudoplatanus</i> Sycamore | <i>Heracleum sphondylium</i> Hogweed |
| <i>Achillea millefolium</i> Yarrow | <i>Holcus lanatus</i> Yorkshire-fog |
| <i>Aesculus hippocastanum</i> Horse chestnut | <i>Hyacinthoides non-scripta</i> Bluebell |
| <i>Alnus glutinosa</i> Alder | <i>Ilex aquifolium</i> Holly |
| <i>Agrostis capillaris</i> Common bent | <i>Juncus acutiflorus</i> Sharp-flowered rush |
| <i>Agrostis gigantea</i> Black bent | <i>Juncus conglomeratus</i> Compact rush |
| <i>Angelica sylvestris</i> Wild angelica | <i>Lapsana communis</i> Nipplewort |
| <i>Apium nodiflorum</i> Fool's water-cress | <i>Lathyrus pratensis</i> Meadow vetchling |
| <i>Arctium minus</i> Lesser burdock | <i>Leontodon autumnalis</i> Autumn hawkbit |
| <i>Arrhenatherum elatius</i> False oat-grass | <i>Linaria vulgaris</i> Common toadflax |
| <i>Arum maculatum</i> Lords and ladies | <i>Lonicera periclymenum</i> Honeysuckle |
| <i>Betula pendula</i> Silver birch | <i>Lotus corniculatus</i> Common bird's-foot trefoil |
| <i>Brachypodium sylvaticum</i> False brome | <i>Lycopus europaeus</i> Gipsywort |
| <i>Bryonia dioica</i> White bryony | <i>Malus sylvestris</i> Crab apple |
| <i>Calluna vulgaris</i> Heather | <i>Mentha aquatica</i> Water mint |
| <i>Carex obrubae</i> False fox-sedge | <i>Molinia caerulea</i> Purple moor-grass |
| <i>Carex remota</i> Remote sedge | <i>Oxalis acetosella</i> Wood-sorrel |
| <i>Carpinus betulus</i> Hornbeam | <i>Persicaria hydropiper</i> Water-pepper |
| <i>Castanes sativa</i> Sweet chestnut | <i>Petasites hybridus</i> Butterbur |
| <i>Centaurea nigra</i> Common knapweed | <i>Plantage major</i> Greater plantain |
| <i>Chemerion angustifolium</i> Rosebay willow-herb | <i>Poa trivialis</i> Rough meadow-grass |
| <i>Circaea lutetiana</i> Enchanter's nightshade | <i>Polygonum aviculare</i> Knotgrass |
| <i>Cirsium arvense</i> Creeping thistle | <i>Populus tremula</i> Aspen |
| <i>Cirsium vulgare</i> Spear thistle | <i>Potentilla erecta</i> Tormentil |
| <i>Corylus avellana</i> Hazel | <i>Prunella vulgaris</i> Selfheal |
| <i>Craetagus monogyna</i> Hawthorn | <i>Prunus spinosa</i> Blackthorn |
| <i>Cytisus scoparius</i> Broom | <i>Pteridium aquilinum</i> Bracken |
| <i>Dactylis glomerata</i> Cock's-foot | <i>Quercus robur</i> Pedunculate oak |
| <i>Digitalis purpurea</i> Foxglove | <i>Ranunculus flammula</i> Lesser spearwort |
| <i>Dryopteris dilatata</i> Broad buckler-fern | <i>Ranunculus repens</i> Creeping buttercup |
| <i>Epilobium hirsutum</i> Great willowherb | <i>Ribes rubrum</i> Red currant |
| <i>Equisetum telmateia</i> Great horsetail | <i>Rosa canina</i> Dog-rose |
| <i>Festuca gigantea</i> Giant fescue | <i>Rubus fruticosus</i> agg. Blackberry |
| <i>Filipendula ulmaria</i> Meadowsweet | <i>Rumex obtusifolius</i> ssp <i>obtusifolius</i> Broad-leaved dock |
| <i>Frangula alnus</i> Alder buckthorn | <i>Ruscus aculeatus</i> Butcher's broom |
| <i>Fraxinus excelsior</i> Ash | <i>Salix caprea</i> Goat willow |
| <i>Galium aparine</i> Cleavers | <i>Salix cinerea</i> ssp <i>oleifolia</i> Rusty sallow |
| <i>Geranium robertianum</i> Herb-robert | <i>Sambucus nigra</i> Elder |
| <i>Geum urbanum</i> Wood avens | <i>Senecio jacobaea</i> Common ragwort |
| <i>Glechoma hederacea</i> Ground ivy | <i>Sorbus aucuparia</i> Rowan |
| <i>Hedera helix</i> Ivy | |

Spergularia rubra Sand spurrey
Stellaria holostea Greater stitchwort
Tamus communis Black bryony
Teucrium scorodonia Wood sage
Typha latifolia Great reedmace
Ulex europaeus Gorse
Urtica dioica Stinging nettle
Veronica beccabunga Brooklime
Viburnum opulus Guelder-rose

Additional records 8th August 1994

Juncus effusus Soft rush
Melanpyrum pratense Common cow-wheat
Rumex sanguineus Wood dock
Torilis japonica Upright hedge-parsley

The fungi were also recorded by Tony Boniface

Boletus versicolor
Psathyrella candolleana
Marasmiellus ramealis
Trametes versicolor
Stereum hirsutum

Additional records 8th August 1994

Laccaria laccata
Scleroderma areolatum

The birds were recorded by Judith Boniface

Linnet
 Woodpigeon
 Magpie
 Green woodpecker
 Blue tit
 Great tit
 Long-tailed tit
 Blackbird
 Greenfinch
 Robin
 Wren
 House sparrow

The butterflies were recorded by Judith Boniface

Small copper
 Speckled wood
 Peacock
 Gatekeeper
 Common blue
 Meadow brown

October 2nd 1994

Mammal Trapping in the Backwarden Reserve

Longworth traps were set by John Dobson and Tony Boniface. A large population of Woodmice was located and one dead Common shrew. No Yellow necked mice, voles or pygmy shrews were found. The nest boxes were examined for dormice but none of them contained these small mammals.

Fungi on Danbury Common

In the afternoon fungi were collected and identified by Martin Gregory and Tony Boniface.

Boletus badius
Boletus chrysenteron

Boletus subtomentosus
Boletus edulis

Leccinum versipelle
Amanita muscaria
Amanita rubescens
Amanita citrina
Amanita fulva
Clitocybe nebularis
Clitocybe flaccida
Collybia peronata
Coprinus micaceus
Paxillus involutus
Lactarius glyciosmus
Lactarius quietus
Russula atropurpurea
Russula ochroleuca
Russula parazurea
Russula xerampelina
Macrolepiota procera
Leucocoprinus brebissonii
Laccaria amythystea
Laccaria laccata

Hypholoma fasciculare
Pluteus cervinus
Marasmius oreades
Stropharia aeruginosa
Hygrophoropsis aurantiaca
Mycena galericulata
Inocybe lacera
Rickenella fibula
Lycoperdon foetidum
Lycoperdon perlatum
Scleroderma citrinum
Auricularia auricula-judae
Calocera cornea
Trametes versicolor
Daedaliopsis confragosa
Piptoporus betulinus
Stereum hirsutum
Nectria sp
Xylaria hypoxylon

The Myxomycetes were recorded by Martin Gregory.

Stemonitopsis typhina
Trichia varia

The following records were made by Alf Gudgion.

Birds

Blue tit
 Coal tit
 Great tit
 Dunnock
 Robin
 Blackbird
 Jay
 Rook
 Common crow
 House sparrow
 Starling
 Woodpigeon
 Collared dove
 Wren
 Greenfinch
 Chaffinch
 Green woodpecker

Mammals

Grey squirrel
 Rabbit
 Fox (scent)
 Badger (prints and hairs)

Amphibians

Common toad

Insects

Caterpillar of Pale tussock moth
 Southern hawker dragonfly
 Common darter dragonfly

Molluscs

Arion ater (Grey specimen of this slug)

Tony Boniface

Some more records for the Backwarden and Danbury Common

I was unable to attend the Field Club meetings but visits to the Backwarden Reserve on 12th August 1993 and 20th August 1994 enabled me to record a number of hymenoptera (bees and wasps) and several species of fly. Of particular interest were two bees *Andrena fuscipes* and *Colletes succinctus*. Both species have a close association with heathland since the females gather pollen from heather. I recorded the *Andrena* here in 1993, but could not find *C. succinctus* (it was a rather windy day), so it was particularly nice to find both species this year.

The two bees are inevitably rare in the county, but I have also recorded *A. fuscipes* from Tiptree Heath, Thundersley Great Common and the remnant heather area at Thorndon Park (outside the Country Park) and *C. succinctus* from Tiptree Heath and Thundersley Great Common. Surprisingly several visits to Sunshine Plain in Epping Forest have failed to turn up either species.

The heather at the Backwarden is also home to some important Essex populations of heathland spiders such as *Mangora acalypha*, a very common species in parts of southern England but with only 3 known sites in Essex; the Backwarden, Tiptree Heath and Thrift Wood between Woodham Walter and Woodham Mortimer. I have failed to find this species in Epping Forest.

Records for the Backwarden Reserve

Hymenoptera (Bees and wasps)

Ants

*Myrmica rubra**Myrmica ruginodis**Myrmica scabrinodis**Lasius niger*

Sphecid wasps

*Symmorphus bifasciatus**Ectemnius continuus*

Bees

*Colletes succinctus**Andrena fuscipes**Lasioglossum calceatum**Lasioglossum laevigatus**Lasioglossum leucozonium**Lasioglossum malachurus**Lasioglossum morio**Halictus tumulorum**Sphecodes ephippius**Megachile willughbiella**Bombus lucorum**Bombus lapidarius**Bombus pascuorum*

Diptera (Flies)

*Conops flavipes**Conops quadrifasciatus**Eumenes tuberculatus*

Orthoptera (Grasshoppers and crickets)

*Chorthippus brunneus**Chorthippus parallelus**Leptophyes punctatissima**Meconema thalassinum*

Arachnida (Spiders)

*Dictyna arundinacea**Dictyna latens**Clubiona terrestris**Misumena vatia**Xysticus cristatus**Philodromus cespitum**Evarcha falcata**Pardosa amentata**Pardosa lugubris**Pardosa nigriceps**Pardosa pullata**Alopecosa pulverulenta**Trochosa terricola**Pirata latitans**Pirata piraticus**Theridion simile**Theridion sisyphium**Theridion varians**Enoplognatha ovata**Araneus quadratus**Mangora acalypha**Hylyphantes graminicola**Pocadicnemis juncea**Oedothorax retusus**Erigone atra**Bathyphantes gracilis**Lepthyphantes ericaeus**Lepthyphantes flavipes**Lepthyphantes tenuis**Linyphia triangularis*

Records for Danbury Common

| | |
|--------------------------------|-------------------------------------|
| Hymenoptera | <i>Hahnia helveola</i> |
| | <i>Hahnia montana</i> |
| Ants | <i>Ero cambridgei</i> |
| | <i>Ero furcata</i> |
| <i>Myrmica rubra</i> | <i>Ero tuberculata</i> |
| <i>Myrmica ruginodis</i> | <i>Crustulina guttata</i> |
| <i>Formica fusca</i> | <i>Anelosimus vittatus</i> |
| | <i>Theridion bimaculatum</i> |
| Arachnida | <i>Theridion mystaceum</i> |
| | <i>Theridion mystaceum</i> |
| Harvestmen | <i>Theridion pallens</i> |
| | <i>Theridion simile</i> |
| <i>Leiobunum blackwallii</i> | <i>Theridion sisyphium</i> |
| <i>Leiobunum rotundum</i> | <i>Theridion tinctum</i> |
| <i>Mitopus morio</i> | <i>Theridion varians</i> |
| <i>Nemastoma bimaculatum</i> | <i>Robertus lividus</i> |
| <i>Paroligolophus agrestis</i> | <i>Tetragnatha montana</i> |
| <i>Phalangium opilio</i> | <i>Pachygnatha degeeri</i> |
| | <i>Metellina mengei</i> |
| Spiders | <i>Metellina segmentata</i> |
| | <i>Araneus diadematus</i> |
| | <i>Zilla diodia</i> |
| <i>Dictyna arundinacea</i> | <i>Mangora acalypha</i> |
| <i>Lathys humilis</i> | <i>Walckenaeria acuminata</i> |
| <i>Argenna subnigra</i> | <i>Walckenaeria unicornis</i> |
| <i>Clubiona reclusa</i> | <i>Entelecara acuminata</i> |
| <i>Agroeca brunnea</i> | <i>Gongylidium rufipes</i> |
| <i>Agroeca proxima</i> | <i>Hypomma cornutum</i> |
| <i>Zora spinimana</i> | <i>Gonatium rubens</i> |
| <i>Anyphaena accentuata</i> | <i>Pocadicnemis juncea</i> |
| <i>Xysticus audax</i> | <i>Diplocephalus picinus</i> |
| <i>Xysticus cristatus</i> | <i>Erigone atra</i> |
| <i>Philodromus albidus</i> | <i>Centromerus sylvaticus</i> |
| <i>Philodromus dispar</i> | <i>Bathyphantes gracilis</i> |
| <i>Ballus chalybeius</i> | <i>Drapetisca socialis</i> |
| <i>Euophrys frontalis</i> | <i>Floronia bucculenta</i> |
| <i>Evarcha falcata</i> | <i>Lepthyphantes ericaeus</i> |
| <i>Pardosa lugubris</i> | <i>Lepthyphantes tenuis</i> |
| <i>Pardosa nigriceps</i> | <i>Lepthyphantes zimmermanni</i> |
| <i>Pardosa prativaga</i> | <i>Linyphia (Neriene) clathrata</i> |
| <i>Pardosa pullata</i> | <i>Linyphia hortensis</i> |
| <i>Trochosa terricola</i> | <i>Linyphia triangularis</i> |
| <i>Pirata latitans</i> | <i>Microlinyphia pusilla</i> |
| <i>Pisaura mirabilis</i> | |
| <i>Agelena labyrinthica</i> | |

Peter harvey

CONTRIBUTIONS TO THE NEXT NEWSLETTER

Please send contributions for the next Newsletter, due out at the end of January, to the Editor, Mr Peter Harvey, 9 Kent Road, Grays, RM17 6DE by the end of January.

FLORA OF ESSEX BY JERMYN

It has been brought to my notice that remaindered copies of Stanley Jermyn's 1974 Flora of Essex are available from C. Arden Bookseller, Radnor House, Church Street, Hay-on-Wye, HR3 5DQ (telephone 0497-820471) for £7.50 plus post and packaging.

Editor

CORRECTION to Noak Bridge Higher Plant List in Newsletter No. 11

Delete *Anthemis arvensis* and insert *Matricaria recutita*

Tony Boniface

ADDITIONAL RECORDS FROM NOAK BRIDGE

On a further visit to the Noak Bridge site on the 15th August 1994 I recorded several more bees and flies additional to the list published in the last Newsletter. Of particular note was the Nationally Scarce (Notable B) *Melitta tricincta*, a bee with an obligate association with the flowers of Red Bartsia from which the females collect pollen. Two males were taken flying over the flowers of Red Bartsia by the side of the path at the southern end of the site. At Grays Chalk Quarry, where there is a large population of both Red Bartsia and the bee, males are frequent in August hawking over the flowers, presumably in search of females.

In the last two years, I have found this bee to be fairly widespread at least in the south of the county, where ever there is a good stand of Red Bartsia; Grays Chalk Quarry, Mill Wood Pit (Thurrock), Ferry Fields (Tilbury), Hadleigh and Benfleet Downs, Wat Tyler Country Park (Pitsea), Basildon Meadows, The Cliff (Burnham-on-Crouch) and Woodham Fenn (South Woodham Ferrers).

Red Bartsia, a plant semi-parasitic on the roots of other plants, seems to prefer areas with some degree of disturbance or at least where there is a proportion of bare ground, probably necessary for its seedlings to establish themselves. At sites for this bee there needs to be appropriate management to encourage a good population of the plant. In particular, although scrub invasion needs to be avoided, mowing of grassland should not take place at times which will remove the pollen and nectar sources for this and other insects.

Hymenoptera

Halictus tumulorum
Melitta tricincta
Sphcodes ephippius

Diptera (Hoverflies)

Helophilus pendulus
Myathropa florea
Syrirta pipiens

Peter Harvey

JOINT ESSEX FIELD CLUB/BRITISH PLANT GALL SOCIETY
MEETING HELD ON THE 7th AUGUST 1994

GALLS IN EPPING FOREST

Eight members of the two organising societies met at the Conservation Centre, High Beech. Epping Forest had been chosen as the venue partly because of the lack of recent records from the site, but also in view of the importance work on galls carried out in the area by Field Club members such as E. J. Lewis and J. Ross in the late 19th and first half of the 20th centuries respectively. However, it is unfortunate that many of the open areas of the Forest have now been lost leading to a lack of the edge habitats that so often prove rich in galls.

After a brief introduction by the leaders, the party set off in search of galls, and the car park proved to be a useful starting point. It is bordered by a good variety of tree and shrub species, which yielded several of the commoner galls. These included bean galls induced by the sawfly *Pontania proxima* on willow, and the gall-mites *Eriophyes macrorhynchus* and *Aceria pseudoplatini* on sycamore. The party then continued in a north-westerly direction through woods and along roadsides, following a roughly circular route with the Wake Arms as the furthest point.

Galls on oak, with the exception of Common spangle (caused by the gall-wasp *Neuroterus quercusbaccarum*) and Oak marble (*Andriscus kollari*), were scarce. However, the thin-walled pea gall caused by the uncommon and localised gall-wasp *Cynips agama* was particularly of note. The thicker woodland, dominated by mature Hornbeam and Beech, had a poor diversity of gall causing species; on Hornbeam, for example, the party found only galls of the mite *Eriophyes tenellus*, and other characteristic arthropod species on this host were apparently absent. However, a few trees with severe witches brooms caused by the scarce fungus *Taphrina carpini* were located, confirming the continued existence here of this species which has long been known from the Forest.

After a picnic lunch, the Honey Lane Quarters, one of the few remaining open areas of the Forest, was explored. Here, the galls of the scarce cynipid *Xestophanes brevitarsis* were found on Tormentil. This was one of the most significant finds of the day, as the species is scarce in Essex and is very much at risk if the loss of open areas continues. The only other recent county record for this species is at Tiptree Heath, where it is also under threat by scrub invasion of its habitat.

In all, 48 different galls were recorded, with one or two exceptions these being among the commoner species found in the county. The enormous pressure on the Forest for recreational use, together with the lack of traditional management had evidently affected the diversity of gall-causing species and, regrettably, it is likely that a continued decrease in the diversity of these organisms will occur.

Species recorded by host

Acer Campestre Field Maple

Eriophyes macrochelus

Eriophyes macrorhynchus

Acer pseudoplatanus Sycamore

Aceria pseudoplatani

Eriophyes macrorhynchus

Carpinus betulus Hornbeam

Eriophyes tenellus

Taphrina carpini

Chamaenerion angustifolium

Rosebay Willowherb

Dasineura kiefferiana

Cirsium arvense Creeping thistle

Urophora cardui

Chenopodium album Fat hen

Hayhurstia atriplicis

Craetagus monogyna Hawthorn

Eriophyes goniothorax

Fagus sylvatica Beech

Eriophyes nervisequus

Eriophyes stenaspis

Hartigiola annulipes

Fraxinus excelsior Ash

Eriophyes fraxinivora

Nectria galigena

Psyllopsiis fraxini

Ilex aquifolium Holly

Phytomyza ilicis

Malus sp. Apple

Podosphaera leucotricha

Potentilla erecta Tormentil

Xestophanes brevitarsis

Brian Spooner and Jerry Bowdrey

Pteridium aquilinum Bracken

Chirosia parvicornis

Dasineura filicina

Quercus robur Pedunculate oak

Andricus anthracinus

Andricus curvator

Andricus fecundator

Andricus inflator form *globuli*

Andricus kollari

Andricus lignicola

Andricus quercuscalicis

Biorrhiza pallida

Cynips agama

Cynips longiventris

Cynips quercus-folii

Macrodiplosis dryobia

Neuroterus albipes

Neuroterus numismalis

Neuroterus quercusbaccarum

Rosa arvensis Field rose

Agrobacterium tumefaciens

Blennocampa pusilla

Sphaerotheca pannosa

Rubus fruticosus agg. Blackberry

Dasineura plicatrix

Salix cinerea Sallow

Iteomyia capreae

Phyllocolpa ?leucasis

Pontania bridgmanni

Salix fragilis Crack willow

Pontania proxima

Sambucus nigra Elder

Epitrimerus trilobus

Tilia ×europaea Lime

Eriophyes leiosoma

Ulmus sp. Elm

Eriophyes ulmi

Urtica dioica Stinging nettle

Dasineura urticae

WHATS ON: ESSEX FIELD CLUB

DECEMBER

Saturday 3rd **Botany Group.** "Essex Flora Project". Planning meeting, and botanical highlights of the year. Bring slides and exhibits. 2.30 pm, at the Boniface's house, 40 Pentland Avenue, Chelmsford. Organiser - Ken Adams. Phone: 081-508 7863
(If directions required phone: 0245 266316).

Monday 26th **General Meeting 1391.** Boxing day ramble. Four miles, Danbury Country Park and Lingwood Common. Meet car park TL 770047 at 11.00 am. Leaders John and Maureen Tollfree. Phone: 0708 742206

JANUARY

Saturday 14th **General Meeting 1392.** The four seasons recording project. Danbury Common. Winter wildlife. Meet Danbury Common car park TL 782045 at 10.30 am. Phone Tony Boniface: 0245 266316 if attending.

Saturday 21st **Mammal Group.** "Batting for Essex" Talk by John Dobson at 3.00 pm. Red Cross Hall, London Road, Chelmsford (car park entrance in Writtle Road).

Sunday 22nd **Bird Group.** Abberton reservoir for wintering birds. Meet at visitor centre car park TL 963185 at 10.30 am. Leader John Bath. Phone: 0277 651890 for details.

FEBRUARY

Sunday 12th **General Meeting 1393.** Birds at Fishers Green and Rye House Marsh. Meet at Fishers Green car park TL 376032 at 10.00 am or Rye House Marsh RSPB reserve TL 387099 at 2.00 pm. Leader John Bath. Phone 0277 651890 for details.

MARCH

Sunday 5th **Bird Group.** Writtle for waders and woodland birds. Meet Railway Station car park TM 181316 at 10.30 am. Leader John Bath. Phone: 0277 651890 for details.

Saturday 18th **Annual General Meeting.** 115 Red Cross Hall, London Road, Chelmsford (car park entrance in Writtle Road) at 3.00 pm followed by presidential address "Changes in the flora of Essex 1974-1994 for better or worse?"

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.