

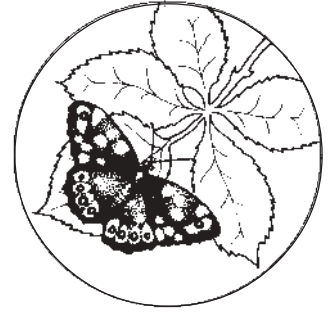
THE ESSEX FIELD CLUB

DEPARTMENT OF LIFE SCIENCES

UNIVERSITY OF EAST LONDON

ROMFORD ROAD, STRATFORD,

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NEWSLETTER NO. 17

May 1996

LIGHT POLLUTION by Irene Buchan

Members must have noticed the coloured night sky which signals the presence of buildings in the distance.

The Council for the Protection of Rural England and the British Astronomical Association are currently running a campaign to minimise the effect of sky-reflected lighting, in particular to make it possible to see the stars more clearly.

There are other issues which I feel that the Field Club - especially with its suggested new title of 'Essex Natural History Society' - should also consider, and which could justify the Society giving its active support/approval to the campaign.

In the Institution of British Lighting Engineers leaflet:- 'Guidance notes for the reduction of light pollution' it is noted that all living things adjust their behaviour according to natural light. Artificial light has done much to safeguard our night-time environment but, if not properly controlled, obtrusive light can present serious physiological and ecological problems. Sky glow, glare and light trespass, waste energy, money, and the Earth's finite energy resources, this usually also means unnecessary emission of greenhouse gases.

The government has issued a 'green report', with the implication that we could do better.

It is well known that some birds and invertebrates are attracted to bright lights, many batter themselves to death or are distracted from traditional migration courses. Birds can sing themselves to exhaustion whilst defending territory in lit areas. Some small birds and mammals, whilst resting or when searching for food, rely on darkness for protection from predators. This must also apply to other species.

Many types of light attract myriads of insects. The greater the spread of light the greater the decimation of certain species which are likely to be the kind upon which other wildlife feeds. We are thus, unnecessarily, colluding in the possible extinction of some kinds of insect-eating creatures and the predators which feed on them.

Recently a TV programme incidentally recorded huge numbers of mayflies attracted to the lights of a spreading American town. The citizens dreaded the emergence of the harmless mayflies, on a short-lived mating flight, and the insects' flight was abortive because they had been lured away from their natural habitat.

At a recent talk, by a Senior Conservation Officer of English Nature, of particular interest was the remark by the lady who had noticed, with approval, the increasing use of energy efficient bulbs in the street lighting of London; this brought a comment on how good they were at attracting moths! I have thought much about that exchange and it really does bring home how difficult it is to calculate/balance the effect of apparent improvements. But it makes it even more important that every effort is made to preserve some large tracts

in the British Isles which are still not subject to light pollution, and to minimise unnecessary spread of light elsewhere. English Nature's 'Species Conservation Handbook' contains a note that light-trapping could badly affect the long-term population of scarce species, and lighting close to sites of high conservation value, or known populations of rare species, could cause problems.

I sit here looking out over the Lea Valley, at the apparent blackness of the reservoirs, the jewelled string of sodium lights along the roads and the tall, brilliant white-light sports standards. It was 'fairylana' when my children were small but we need to re-think the need for light at any cost. Some of the Lea Valley is SSSI, and the SSSI of Epping Forest, with its more than 350+ Red Data Book species of invertebrates, is not far away.

On holiday last year I was appalled at the installation of high sodium lamps on 'improved' roads in rural hamlets near Snowdonia. A campsite in a fold of the Welsh hills was invisible during the day but aglow at night. In the north of Scotland, coastal, morrland-edge Durness has had similar monstrosities imposed on it. OK (?) for human safety (?) BUT what is lost that could have been retained with a more thoughtful approach?

Particularly obtrusive lighting appears to be the fashion on golf driving ranges, where lights are blue-white, horizontal, with conical display. Football and sports grounds are often over-well lit. Pubs, new housing developments and out-of-town shopping centres use unshielded, inefficient globular lights. Once planning applications are approved external lights attached to a building are not subject to regulation.

The Millenium celebration suggestions include 'Light up the town'. Evolutionary millenia have ensured that living forms occupy different niches. Surely it is important that people do not, unthinkingly, rapidly reduce the number of niches by lighting up the countryside too.

If we wish to retain a diverse wildlife we need to ensure that artificial lighting is used sparingly.

RARE VISITOR TO WRITTLE

Whilst manning the door at the Writtle Sale of the Chelmsford group of the EWT on Saturday 7th October 1995, Stan Hudgell noticed a fungus growing under the railings between the pavement and the Parish Hall. He drew it to the attention of Tony Boniface, who collected the specimen and identified it as *Leucoagaricus macrorhizus* Locq. ex Hora. This member of the parasol group of fungi was shown to Geoffrey Kibby, who is the Essex Field Club recorder for fungi. He suggested it could be unusual, and that it should be sent to Alick Henrici, who is the expert on this group. He confirmed my identification and told me that it had only been found twice before in Great Britain, once in 1983 in a grennhouse in Bangor, and once in Kent just a week earlier than our own specimen. The fungus is more common on the continent, and favours warm, dry sites. The dried fungus is now residing in the herbarium at Kew. So don't ignore specimens on the grounds that they must be common. Examine them carefully, make notes, and have their identity checked. They can be dried over a radiator or a hot-water tank. Remember collecting fungi in small numbers does not make them rarer as the fungal threads are still in the soil or wood on which they grow.

Tony Boniface

HOW RARE IS THIS WAX-CAP?

Hygrocybe calyptraeformis (B. & Br) Fay

This unique toadstool is listed as Vulnerable in Bruce Ing's "Provisional Red Data List of British Fungi". This means that it is likely to become endangered in the near future if the causal agent of its decline is not reduced. This agent is the loss of its habitat, namely, unimproved grassland. A true estimate of its rarity could be obtained by people reading this article examining their local churchyards during October and November and sending any sightings to me. I have already found it in Little Leighs Churchyard in 1993 and 1994 and Graham Smith has found it in Fryerning Churchyard.

It is unmistakable and does not require microscopic examination. Rosy-pink to lilac in colour, with a pixie-cap up to six centimetres across, opening out and splitting radially when older. Like all wax-caps the gills are relatively thick and waxy. The stipe is lighter in colour and the whole fungus easily breaks up when handled.

Your observations if sent to Tony Boniface, 40 Pentland Avenue, Chelmsford, Essex, CM1 4AZ could establish its present situation in the Essex countryside.

Tony Boniface

AN ASPEN PUZZLE

For very many years I have been puzzled by the occasional stand of tall straight Aspen in a woodland setting, up to 20 metres high. The typical woodland population in my area is on de-calcified boulder clay the drainage of which, is such, that the watertable can be expected to be quite close to the surface in winter and often has clumps of Rough stalked meadow grass growing underneath. The soil does not give the impression of being infertile, but the typical tree is a very poor specimen probably no more than 6 metres high, the top branches more horizontal than upright.

The literature I have consulted, as well as personal observation, suggests woodland clumps are all identical, the same genetic stock from the same original tree on that site which have arisen from the ever present but often overlooked network of underground roots. When the woodland is coppiced the cut stumps seem not to grow again, instead the underground network produces many shoots which grow to shoulder height in the first year with great vigour but which usually gives a poor low tree.

Aspen seldom germinate from seed because a very moist environment is needed as soon as the seed drops and then for the remainder of the growing season. Clumps of Aspen, which are usually very dominant over a small area are invariably of the same sex. This makes an origin from germination unlikely this would result in a mixed population. I have heard of the occasional single tree in a woodland setting, which is straight and tall which I have to accept is because of a dominantly competitive environment. I started to look at Aspen growing in the shade of other trees and often found the Aspen being forced away to an angle of perhaps 45° with the top branches reaching perhaps to the ground.

The answer seems to lie in an area of some size being recently coppiced, of predominantly Aspen facing approximately north, shaded by large dominant uncut trees. As a young tree Aspen is very vigorous and very soon outstrips its neighbours, competition is no longer present so upward growth ceases while the adjacent trees catch

up, then overtake. Because the character of Aspen growth has changed little more growth occurs.

The critical factor seems to be the presence of shade to keep drawing the Aspen trees upwards which they seem unable to do on their own. A feature of these stands is the fact that all the trees are growing at an angle away from the shading tree.

David Bloomfield

A BEE AND SPIDER-HUNTING WASP NEW TO ESSEX

On the 21st April this year Colin Plant, Peter Yeo and myself visited an area near the Essex/Suffolk border south of Glensford. There is a section of old disused railway track adjacent to old sand and gravel pits with areas of sallow, sedge marsh, sandy banks and lichen heath. We all took males (determined later) of the Nationally Endangered (RDB1) cuckoo bee *Nomada xanthosticta*, a cleptoparasite of the spring mining bee *Andrena praecox*. The *Nomadas* were flying in numbers around the bottom of a sallow bush at the edge of an area of lichen heath. The host bee was present in small numbers, collecting pollen from the sallow catkins.

On a further visit the following weekend I found the male *Nomadas* present in considerable numbers flying around the bottom of sallow bushes at a number of places on the edge of the lichen heath. Several females were found flying along a north-facing bank between the lichen heath and the old railway track where the host bee seemed to be nesting. Spider hunting wasps were active and several males were collected. These later proved to be the widespread species *Priocnemis perturbator* together with two males of the Nationally Scarce (Notable A) species *Priocnemis coriacea*, apparently new to Essex.

The Essex Spider Group has visited the site on several occasions to record spiders and it is known to have a diverse and interesting fauna. The section of old railway track is home to the only known Essex colony of the Nationally Rare (RDB3) bee *Andrena hattorfiana* which has an obligate association with scabious, usually Field Scabious *Knautia arvensis*. I first found the small and vulnerable colony of this bee in 1992 and it was still present in 1994 but I could only find two females during a visit in 1995, when the quantity of scabious was much reduced by the drought conditions. The bee was recorded in the Colchester area by Harwood at the end of the last century and it is just possible that it may survive elsewhere if there are sites where scabious still occurs in any quantity.

Some parts of the Glensford site seem to represent old unimproved remnants and this is exemplified by the presence of Meadow Saxifrage *Saxifraga granulata* by the edges of the lichen heath and old railway track and areas of sedge marsh by the side of the River Stour. Like other sites which have in recent years proved to be of particular importance for invertebrates, Glensford Pits possess a complex mixture of old habitats combined with more recent disturbed habitats. The sand and gravel pits were probably first excavated during the war, but sandy banks and sparsely vegetated ground still remain. This mixture of unimproved and disturbed habitats is found in important sites of the East Thames Corridor for example at Mill Wood Pit, Broom Hill and Mucking Heath (Orsett Golf Course) in Thurrock and Eastbrookend (Dagenham Chase).

Peter Harvey

CONTRIBUTIONS TO THE NEXT NEWSLETTER

Please send contributions for the next Newsletter, due out in August, to the Editor, Mr Peter Harvey, 9 Kent Road, Grays, RM17 6DE by the middle of July.

Remember that the production of the Newsletter depends on contributions from members. I am sure that many members must have news, observations or the results of fieldwork that would be of interest to others. If text has been typed on a PC computer then a disk with the file would be very helpful.

ESSEX MOTH GROUP

The above group has recently started. If you would like a copy of the first newsletter please send a SAE to:

Mr B Goodey, 298 Ipswich Road, Colchester, Essex CO4 4ET

EFC members are welcome to attend the below meetings. Circumstances have meant having to focus these in the north east Essex area, a situation we hope to remedy in the future. Please phone the contact beforehand in case of late changes/weather conditions. *MV = mercury vapour.*

Sat. 4 May Abberton Reservoir Essex Wildlife Trust Nature Reserve
MV. Meet at the visitors centre at dusk. EWT meeting. *Brian Goodey*
(01206 841224)

Sat. 11 May Fingrinhoe Wick Essex Wildlife Trust NR
MV. Meet at the centre at dusk. EWT Watch meeting. *Brian Goodey*

Sat. 15 June Fingrinhoe Wick Essex Wildlife Trust NR
MV. Meet at the centre at dusk. *Brian Goodey*

Sat. 6 July High Woods Country Park
MV. Meet at Chanterelle car park TM009269 at dusk. *Dick Mash/Brian Goodey*

Sat. 13 July County moth night
Run a trap in your garden or nearby locality and send me the results. The combined data may yield some interesting facts. Include species, quantity, duration and light source.

Sat. 20 July Daws Hall Nature Reserve
MV. Meet at Daws Hall at dusk. *Iain Grahame/Brian Goodey*

Sat. 3 Aug. Bradwell Moth Trap
Meet at Curry Farm TL995056 at 2.30pm. *Bob Dewick* (01621 776241)

Sat. 17 Aug. Abberton Reservoir Essex Wildlife Trust Nature Reserve
MV. Meet at the visitors centre at dusk. EWT meeting. *Brian Goodey*

WHATS ON: ESSEX FIELD CLUB

MAY

Sunday 26th **Botany Group.** BSBI Atlas 2000 recording meeting. Meet by Corn Exchange, Thaxted at 11.00am. Groups to record 10Km squares 52, 62, 53 and 63. Bring packed lunch. Leader Ken Adams 0181-508 7863.

Friday 31st **Bird Group.** Kingfisher search along the River Wid at Mountnessing followed by bird group annual meeting. Meet TQ623974 at entrance of track at 7.00pm. Leaders Judith and Tony Boniface (01245) 266316.

JUNE

Saturday 1st **Botany Group.** BSBI Atlas 2000 recording meeting. Meet by Leaden Roding Church at 11.00am. Groups to record 10Km squares 50, 60, 51 and 61. Bring packed lunch. Leader Ken Adams 0181-508 7863.

Sunday 2nd **General Meeting 1405.** Birds and Botany at Two Tree Island EWT Reserve, Leigh. Entrance at TQ 825855. Park in car park just before entrance. 10.00am. Leaders Tony Boniface and John Bath (01245) 266316.

Friday 7th **Mammal Group.** Fox watch. Phone John Wright for details (01702) 78409.

Sunday 9th **Geology Group and Essex Rock and Mineral Society.** Fossils at Walton-on-Naze. Meet Naze car park at 10.00am TM265234. Leader Gerald Lucy (01799) 523310.

Sunday 9th **Joint Meeting.** with Colchester NHS. Invertebrates and Botany. Meet at 9.45am at Frinton at southern end of Greensward. TM 234190. Leader Terri Tarpey (01206) 865775.

Sunday 16th **Geology Group.** Recent developments in the Geology of the Lower Thames. Meet Purfleet Station at 10.00am. TL 554781. Leader Peter Allen. Phone leader if attending (01992) 630661.

Saturday 22nd **Botany Group.** The Naze, Walton. Meet Naze car park. TM 265235 at 11.00am. Leader Jeremy Ison (01376) 345235.

Sunday 23rd **General Meeting 1406.** Birds, insects and plants in Thorley Flood Pound. Meet by Lock Gates on River Stort in Spellbrook Lane East. TL 490176 at 10.00am. Leaders Colin Plant, John Bath and Tony Boniface (01245) 266316.

Friday 28th **Mammal Group.** Bat roost visit. Phone John Dobson for details (01245) 224408.

Saturday 29th **Botany Group.** Plants and general natural history. Hill Farm Wood, Hempstead. TL 637393. 10.30am. Leader Nick Gordon (01799) 510333 day.

- Sunday 30th **Joint Meeting.** with Colchester NHS. Invertebrates and Botany. Meet at 10.00am at the Community Hall, Castle Hedingham. Leader Jerry Bowdrey (01206) 282936 day (01255) 880023 evening.
- JULY
- Friday 5th **Bird and Mammal Groups and the Essex Bird Watching Society.** Bats and birds at Hanningfield reservoir. Meet 7.30pm West Hanningfield car park. TQ 730996. Leader John Dobson (01245) 224408.
- Sunday 7th **Botany Group.** BSBI Atlas 2000 recording meeting. Meet at Thorndon EWT Centre at 11.00am. Groups to record 10Km squares 58, 68, 59 and 69. Bring packed lunch. Leader Ken Adams 0181-508 7863.
- Wed. 10th **Moth Trapping** at Old Water Works Site, Sandford Mill. Meet outside gate. TL 739063 at 8.00pm. Leader Tony Walentowicz (01245) 350016.
- Saturday 13th **Geology Group and Essex Rock and Mineral Society.** Derived fossils, rocks and minerals at Roxwell gravel quarry. Meet Roxwell Road entrance at 8.00am at TL 653086. Leader Gerald Lucy (01799) 523310.
- Sunday 14th **Botany Group.** Markshall, Lily and Cleveland Woods. Meet 10.30am at Marks Hall Visitors Centre. TL 839251. Leader Jeremy Ison (01376) 345235.
- Saturday 20th **Botany Group.** BSBI Atlas 2000 recording meeting. Meet in car park at Bull Wood, Hockley. TQ 833923. 11.00am. Groups to record 10Km squares 88, 89, 98 and 99. Bring packed lunch. Leader Tim Pyner (01702) 332425.
- Sunday 21st **Joint Meeting** with Colchester NHS. Invertebrates and Botany. Meet at 9.30am at Goldhanger Church. TL 905088. Leader Joe Firmin (01206) 241389.
- AUGUST
- Sunday 4th **Insects.** Meet Cudmore Grove Country Park car park, Mersea Island. TM 065147. 11.00am. Leader Roger Payne (01702) 215130.
- Saturday 24th **Joint Meeting** with Colchester NHS. Invertebrates and Botany. Meet at Old Hall Marshes RSPB Reserve at 9.45am. TL959124. Leader Nigel Cuming. Details from Jerry Bowdrey (01206) 282936 day or (01255) 880023 evening.

ESSEX FIELD CLUB NOTELETS

The notelets illustrated are marketed in packets of ten, two of each design, together with envelopes. They are on sale at Field Club Meetings at £1.00 per packet or by post for £1 + 75p to cover postage and packing.

Orders to Tony Boniface at 40 Pentland Avenue, Chelmsford, Essex, CM1 4AZ. Write now to ensure your supply while stocks last.

