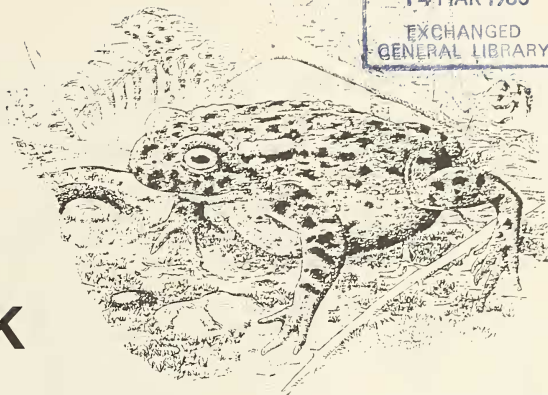


# THE NORFOLK NATTERJACK



The quarterly bulletin of the Norfolk & Norwich Naturalists' Society

No.18

August, 1987

\* \* \* \* \*

## USE OF HERBICIDES IN FORESTRY COMMISSION PLANTATIONS

Those of you who saw the recent correspondence in the "E.D.P" on this subject may be interested to know the outcome.

On Friday June 5th, Ken Durrant and I went to West Harling Gallop, where we were met by Mr Len Simpson, area manager of the Forestry Commission, accompanied by Mr Eric Rogers and a forest conservator. Also present a member of the Suffolk Trust for Nature Conservation and two members of the Norfolk branch of the Butterfly Society.

We were taken round four compartments, the two foresters explained with the aid of a pamphlet and map, how each compartment had been treated since clear felling. We were also given certain assurances about future treatment in areas which are to be clear felled. About 460 hectares are set aside for clear felling annually and about two and a half times that amount is treated with herbicide. In areas of high ph, it is customary to bulldoze the stumps into rows as a precaution against Fomes (Conifer Heart Rot). In areas not at risk the stumps are left in situ.

Where Bracken is a problem, ASULAM is sprayed at 7 to 10 litres made up to 20 litres with water. This spray is specific to Bracken. If the problem is Bramble, Glyphosate (Roundup) is used at 2-3 litres made up to 20 litres with water. In each case, this is sufficient for 1 hectare and is sprayed during the August before replanting, using a tractor mounted controlled droplet applicator especially developed by the Forestry Commission. We were given a demonstration (using water).

The applicator nozzle is a spinning plastic disc with teeth round the margin, revolving at 5,000 rpm. this throws out relatively large droplets which fall to the ground within eighteen inches. There is very little spray drift, as there is with agricultural sprays where the application is in the form of a fine mist. For band spraying growing trees, three nozzles are used, each covering about eighteen inches on either side of the rows. For total coverage, e.g: for pre planting block spraying, two extra nozzles are put in to close the gaps. All drivers have very thorough training in the use of both machinery and chemicals and from the

beginning of 1988 will have to obtain a certificate of competence. Private sector contracting out is being encouraged, subject to certification, though at the moment, only the Commission's own operators have the necessary expertise.

Among other safeguards mentioned, all operators have to check the accuracy of each applicator nozzle at least once per day, during which he will spray about 8 ha.

Compartment 72a has been treated as follows since clear felling.	
August 1983	Overall spraying with Roundup.
Winter 83/84	Replanted Corsican Pine.
Feb. 1984	Band sprayed with ATRAZINE. (This is specific to grass.)
Sep. 1984	Tractor swipe between tree rows. (Also demonstrated to us)
Mar. 1985	Band sprayed with atrazine.
June. 1985	Tractor swipe.
April 1986	Band sprayed with Atrazine.
June 1986	Tractor swipe.
Sep. 1986	Band sprayed with Roundup to check invading bramble.

At the time of our visit no further application of Roundup were envisaged, though we were told in areas where birch invades, Roundup can be used up to the seventh or eighth year. This is possible as the arms of the sprays are on a vertical boom which can be raised as high as seven or eight feet above ground level.

The General appearance of compartment 72a was pleasing with good displays of flowers of certain species, notably Ox Eye Daisy, the seeds of which must have been laying dormant since the grassland preceding the original planting. Quite a number of butterflies were on the wing, notable Brown Argus.

We were assured that Roundup would be used as little as was practicable given the restraints of good forestry husbandry as apart from other considerations it is very expensive. The treatment of compartment 72a was given as a norm that they would hope to achieve, though some compartments would need less and others might need more spraying, depending on the 'pest' species. Both Mr Simpson and Mr Rogers emphasised that they had no desire to harm the environment and would be only too willing to consider each case on it's merits, in the event of any uncommon plants , etc being notified to them before spraying might be taking place. (I have recently received a full spraying programme for Asulam (Bracken control) for 1987.

We felt that the morning had been well spent and that a new spirit of understanding between the various bodies was afoot and could certainly do no harm. We would like to take this opportunity of thanking Mr Simpson for giving up his time and arranging the meeting and also Mr Rogers for his excellent commentary on what was taking place and for arranging the machinery demonstration.

Alec Bull



THURSDAY 29th OCTOBER 1987 at 7.30 p.m. at HOW HILL

### AFRICAN SAFARI

An evening of East African Wildlife

Illustrated talk by Ivan West, together with cheese and wine. Fully inclusive tickets £3 each. Pat proceeds to British Butterfly Conservation Society (Norfolk Branch) and part to the How Hill Trust.

How Hill Trust, How Hill, Ludham, Gt. Yarmouth Nr29 5PG Telephone: St. Benets 555 for tickets.

### SOCIETY NOTICE BOARD

#### WORKSHOP DATES.

(All at the Castle Museum, at 7.30 pm unless stated otherwise.)

**5 August - Water Weeds.** This identification workshop should help everyone with an interest in freshwater life. Not to be missed!

**10 August - Caterpillar workshop - Techniques and identification.** Pets welcome.

**24 September - Moths.** Identification of Autumn species and review of the survey.

**15 October - Slugs!** Pets welcome.

**Future workshops** will include: insect photography; introduction to lichens; centipedes, millipedes and woodlice; bumblebees; small mammals; dragonfly larvae.

### FUNGUS FORAYS-1986

It has been some time (Transactions - Fungus Forays for 1984) since a report has been given of the work of those members engaged in studying and recording the fungi of the County.

Over the last eleven years we have collected an estimated 17,000 records containing 2,000 species. This is supported by a herbarium of some 1600 species in 3,500 specimens. These records are only of those identified visually or microscopically and do not include the work of previous mycologists. The finds of Society members, and from forays of Norfolk Naturalists' Trust forays have been most helpful.

The following interesting or rare item were recorded in 1986. and are selected from the 120 species added to our list.

An unidentifiable mat of dark red fungal threads was found growing over the bark remains of an old stump. Some of this was removed with the bark and kept moist in a plastic container. In a few weeks fruiting bodies of small pinhead size, and deep red colour could be identified as Hypomyces rosellus. This is an uncommon find, but not so interesting as another fungus growing with it on the bark. We recorded this in Warwickshire some years ago (a first British record) Arachnocrea stipata.

This Year we added to our list Pluteus leoninus from How Hill, We had not seen this species for many years until members (G & C Meek) found it growing here on a fallen tree at How Hill.

Another species was Chamaemyces fracidia a single specimen in West Harling Woods. It occurs sporadically not appearing every year.

We might expect after eleven years to have recorded Mycena crocata, Leotia lubrica and Entoloma lividum but only this year could We add them to the list.

A welcome addition was Phyllotopsis nidulans collected in West Harling Woods by Alec Bull.

Apart from the first two fungi mentioned in this report the remainder are illustrated and described in "mushrooms" Roger Phillips (Pan Books) and "Mushrooms and Toadstools" David Pegler (Mitchell Beazley Nature Handbook) for Phyllotopsis nidulans.

The season for Mushrooms and Toadstools has already begun and forays devoted to this subject are arranged. They have always been well supported and beginners are usually surprised at the variety of species they have seen.

Reg Evans.

#### PARASITES OF LEAF CUTTER BEES

Gardeners often see Rose leaves which have had small semicircular pieces cut from the edges causing disfigurement.

Leaf Cutter Bees are responsible, taking away the pieces to make cells for the young of the following generation. They have also been seen taking pieces from other plant leaves and in our garden Enchanters Nightshade Circea lutetiana was chosen. Sections of the leaves are placed by the bee in hollow stems or tunnels in rotten wood and made into small compartments each containing a Bees egg, pollen and honey, as a food store for the emerging larva.

On Buxton Heath on August 7th my attention was drawn to a rotten Birch log by a large black and yellow Digger Wasp Ectemnius cephalotes seen hovering around and exploring tunnels at the end. A piece of this wood was taken and Digger Wasps were expected to emerge the following year.

However on July 22nd some Leaf Cutter bees emerged and were released. Shortly after two parasites followed. These were very similar to the Leaf Cutter Bees.

They enter the Bee's tunnels and lay eggs upon the provision collected by the host. These eggs hatch first and the larvae destroy the Leaf Cutter Bees eggs and take over the food.

These parasites are sometimes known as Cuckoo Bees Coelioxys inermis

Reg Evans.

#### BROOMRAPES

These were mentioned in a previous Natterjack on Foxglove Orabanche minor and on Ivy Orabanche hedera.

The foxglove plant is now bearing six flowing shoots. The ivy brommrape has had its best year since being established and has 25 flowering shoots

Lil & Reg Evans

## F.W.FROHAWK HIS LIFE AND WORK.

Published by Crowood Press. Author June Chatfield.

Frederick William Frohawk (1861-1946) was born at Brisley in mid Norfolk, son of a gentleman farmer. Encouraged by his mother he became interested in all the natural world around him from an early age, when three years old he recalls peering into a matchbox to see if a Gooseberry Moth had emerged from a chrysalis.

Despite many moves with his family during his early years to Gt. Yarmouth, Ipswich and Croydon his interest and observations never waned, he developed into a great self taught naturalist and illustrator.

After the death of his father the secure and leisurely lifestyle to which he was accustomed came abruptly to an end, he was therefore forced to earn a living.

With the naturalist's eye for detail and his ability as an artist he was appointed zoologist artist to The Field in 1881. Much of his early work was made into woodcut engravings for the publications of many authors, these commissions to illustrate animals, birds and reptiles provided a moderate income, he could illustrate four paintings of birds per week when pushed. His subjects were from living specimens in captivity or from skins brought back from expeditions, they ranged from microscopic moths to the 11 foot 6 inch extinct Moa of New Zealand.

Visits to the British Museum brought him into contact with professional naturalists as well as the titled naturalists of the day, many who were to commission him to produce illustrations for their publications.

To the entomologist he is best remembered for his volumes on:-

Natural History of British Butterflies 1924.

The Complete Book of British Butterflies 1934.

Varieties of British Butterflies 1938.

These books were superbly illustrated in colour and depicted the entire metamorphosis of each specie which had taken him twenty years to complete, they were far superior to any previously published works, unfortunately all the plates etc. were lost when his house in was bombed in 1940, but he had set a pattern for researchers to follow.

June Chatfield has produced a superbly illustrated easily read biography of a great Victorian naturalist, quoting from much of his unpublished memoirs. Her last sentence sums up the great man;-

"His whole life was a learning process and he never lost his respect and sense of wonder for the natural world: we have much to learn from him."

Ken Durrant.

## F.W.FROHAWK HIS LIFE AND WORK.

### Second opinion

I am not an entomologist just a general naturalist, also I do not like reading biographies. My first impressions were of the beautiful illustrations. The first chapter (East Anglian Childhood) reminded me of my childhood in mid Norfolk. I do not totally agree with Ken about his



change of fortune I think he probably would have taken a very similar way of life.

I have enjoyed reading this book very much. I found his descriptions of habitats and the changes that were taking place very interesting, as the same thing seems to be happening here (suburbia) along the A11 and A47 like a big ugly Y across the County.

I also found very interesting reading about his research into life history of species and the connections between different species, as this is the purpose of being a naturalist, not just building up a collection of butterflies.

This is a book I can read again after some time, also when I have a spare moment just to pick it up and look at the illustrations will give me much pleasure. I found the information about the different methods used for printing his drawings and paintings as different techniques were developed very interesting.

Colin Dack

#### THE NORFOLK BIRD ATLAS

Did you miss the pre-publication offer, if so you can obtain a copy from Mrs.M.Dorling, 6 New Road, Hethersett, Norfolk. NR9 3HH. price £5 + 50p P&P. cheque made payable to Norfolk & Norwich Naturalists Society.

The Norfolk Bird Atlas is also on sale in good book shops price £5.

This Society venture was published in November and contains the results of fieldwork over a six year period by over 200 observers. The Norfolk Bird Atlas was first organized by Barrie Harding and brought to a successful conclusion by Geoffrey Kelly.

#### 1986 ONE-DAY CONFERENCE

The proceedings of the conference "The amateur naturalist in the changing countryside" have now been published as a 44-page booklet. This has been sent free to all conference participants. Other members of the Society may obtain copies at £1.00 each. The cost to non-members is £2.00.

you can obtain a copy from Colin Dack, 12, Shipdham Road, Toftwood, Dereham, Norfolk. NR19 1JJ. price £1 + 30p P&P. cheque made payable to Norfolk & Norwich Naturalists Society.

Colin Dack

This book contains Dr Ted Ellis review the countryside as he had known it over many decades, from the days of the Breydon punt-gunners with their huge bags of waders to the present day. It is a fascinating account of life as a naturalist. No one realised that Ted was in fact reviewing his whole life; it was the last occasion on which he spoke to the Society.

K. B. Clarke

#### THE AMATEUR NATURALIST IN A CHANGING COUNTRYSIDE

As I look on myself as an amateur naturalist with a special interest in geology I read the booklet with interest. It would seem that the booklet has a lot to say about changes occurring in the countryside but little about the role of the amateur in these matters. We have the role of museum staffs (hardly amateurs); A.L.Bull's article is much more to the point. The M.O.D. may seem a surprising partner for conservation- but not to those of us who have worked on airfields and seen how skylarks nest right next to very noisy jet aircraft or a swallow nests on the axle

of a generator van. Many species will adapt well to the presence of man, even thrive. The gravel workings which are so unpopular with those who come to live in the countryside, but do not earn their living from the countryside, form immediate attractive living sites for martins and burrowing wasps. A drying shed for a local lime pit was immediately adopted by a pair of kestrels as a nesting site. The worked areas and spoil banks were beautiful with masses of wild flowers from plants which enjoy disturbed ground, and partridges and other birds moved in.

When I read about the destruction of hay meadows or the reduction of unique areas of Breckland, I find myself asking how the plants and animals survived before man created these habitats. Hay meadows are rare in nature; the Brecks were partially created by the introduction of the rabbit I understand. The site for a rare orchid in Suffolk is the bottom of an old pit, dug through the acid sands and soil to the chalk below (Un-natural!); the apparent reduction of numbers of the orchids over some years may have been due to accumulation of dying leaves forming an acid soil again (natural!).

By managing a garden the amateur may protect some plant species and attract many birds, mammals and amphibia etc. But it is an "unnatural" habitat. My own garden is lamentably short of butterflies these days. Food plants are there, plentiful flowers and nectar which attract bees. Asked by someone how they could encourage butterflies in their garden instead of saying "plant buddliea", I half seriously suggested shooting some of the birds! after all the Blue Tits we feed and encourage in the winter set to work to catch all the caterpillars in the summer. The destruction of hedgerows has probably funnelled more birds into urban parks and gardens and formed concentrations which are fatal to butterflies. Maybe pesticides are not the real villain. Real conservation management is difficult since what is good for one group may be fatal for another. Perhaps the real role of the amateur is to try to understand the ecological inter-reactions of species and man, to talk to farmers, park and road managers and so on, to explain how just a little less cutting of roadside weeds at certain times of the year or the toleration of some predators in reasonable numbers, makes the world a better and more interesting place for everyone. The little group of ducks paddling about on the village pond may look attractive but all too often it is overstocked with a mongrel population which have killed just about everything else in the pond. The amateur naturalist can explain how a pair of mallard and a pair of moorhens are probably the answer and the rest can happily provide a Sunday dinner for someone.

I believe that the amateur naturalist's best role is to observe, to record and to educate children and adults in the real meaning of nature. One of the professional's duties should be to encourage and help direct the amateur's interest so as to produce a real understanding of our ecology, and the relationship between species, which includes man. After all if man has eliminated some species he has introduced and encouraged others. The rabbit and common garden snail might not be in England if it were not for man and without man they certainly would not be in Australia!

P. Cambridge

Your letters / comments

About the amateur naturalist in a changing countryside would be welcomed. This is a subject about which there are many points of view, which often conflict. Your letters to Colin Dack Editor.

## A NEW DATABASE FOR THE SOCIETY

As the membership Secretary I keep a database (that is like a card index) on computer. In fact I keep two one on Commodore 128 with a one megabit disk drive using Superbase 128 and one on Commodore 64 in 1541 disk format using superbase 64. So if I was unable to print the labels for the mailing, someone with a Commodore 64 could (this has been arranged). This database only has your name address and type of membership on file. I intend to leave like this for the time being.

I wish to start a new database on Commodore 128 only to hold information about your specialist natural history interest. This is only for members who actively pursue their specialist interest. So if at some time there is a need to contact members with a one or a combination of interests I can do so. If for instance some members of the Geological Society were studying small mammals in a geological deposit and would like to compare their finding with the present day populations I would be able to carry out a search of the database to see who would be most able to help.

Under the Data Protection Act I can only give your details to those who need to know - eg. the Treasurer unless you agree that a wider use can be made of the records. to seek your authority to add your details to the new database I have prepared some forms for completion by members. These can be obtained from me at meeting. I shall not commence work on the new file until the coming winter.

Why a new database? This is so that all members of a family membership can be given a file each. I believe this could add a new dimension to the Society and to your study of natural history.

## ALTERNATE FOOD PLANT FOR FIGWORT WEEVIL

The Figwort Weevil Cionus scrophulariae L. has been observed feeding on Buddleia gobosa in a garden in Blue Bell Road Norwich for the last four years in late spring. P. Cambridge

## WICKEN FEN

Sunday 5th July 1987

Only two members turned up for this meeting Carol Haines and my self (this equals Alec's meeting at Ramparts Field and West Stow 2nd July 1986).

In the morning we walked round the outer walk. Many Damsel flies were on the wing and some Dragonflies. The Figwort had been devastated by the larvae of Mullein Moth. In the afternoon we walked round the inner board walk.

A new inner board walk has been constructed which makes the reserve accessible to disabled naturalists, they can now visit and enjoy this reserve.

Colin Dack

CONTRIBUTIONS TO THE NEXT NATTERJACK should be sent to Colin Dack, 12, Shipdham Road, Toftwood, Dereham, Norfolk. NR19 1JJ, to arrive not later than 15th October 1987. Contributions sent after this date will not be accepted for the November Natterjack.