

TRANSACTIONS
 OF THE
 LINCOLNSHIRE
 NATURALISTS' UNION

(Lincolnshire and South Humberside)
 Vol. XX No. 3 1982

in the state they were in at and by means of the Di. luvial Menstru-
 then covered & adhered to them and has ever since remained and yet
 that beautiful appearance as if Nature has delineated their Perfect
 forms in Water on the surface of the Stones with a Proof of the like
 in a young Small Thin & Tender Nautilus which then underwent
 the same Change & being fill'd with matter of the like Stone
 is become a most elegant Nautilus minera obdura in his Col-
 lection.

Nautilus Atlantico Philoensis.

The Secretary shows
 the Company a Butterfly
 which he took on the Dozens
 Bank of which he sent a
 Limning to Mr La Cote to whom & to the American Society is entirely
 unknown therefore the President desired it might be inserted into the
 Book and at his Instance the Secretary obligingly made these very exact pictures these of above.



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Edited by
 John East F.I.M.L.S., M.B.O.U.

Headquarters: City and County Museum, Lincoln

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Cover photograph:

Page from Minute Book of Spalding Gentlemen's Society by E.J. Redshaw

in Memoriam

ERIC CLIPSON
(1905-1981)

I first met Eric shortly after his retirement in 1963 and when we established the unofficial Bardney Nature Reserve in 1969 he became a regular visitor. From that time until a few weeks before his death Eric was a familiar sight at Bardney, usually with his camera at the ready.

Following his retirement he decided that the time had come to devote more time to his interest in wildlife and its conservation. To help him in this he purchased a camera and associated equipment and an impressive library of photographs was the result.

Eric's family come from the Woodhall area and indeed it is almost impossible to walk far before meeting at least one of his relatives. This abundance was so often put to good use resulting in permission to enter many parts of Lincolnshire normally barred to the rest of us. At least one Lincolnshire Trust reserve can be directly attributed to Eric and his explorations.

In case the impression could be gained that Eric was just a watcher I must add that on one occasion I was called to a smallholding near Woodhall where he had obtained two very sound sheds which he thought might be of use at the Bardney Reserve. Additionally it would be impossible to assess the number of hours he spent manufacturing nestboxes for use there. As a result many species including Barn Owl, Tawny Owl and Kestrel benefitted directly from his labours.

If any criticism could be made of Eric Clipson it could only be that he was too modest! Right until the last I was still learning about his achievements but perhaps the most significant revelation came a few years ago when it became apparent that his timely efforts in another direction came to fruition.

In the few days before his retirement, the company for which he worked had recently been taken over and much clearing out was under way. Eric noticed that large quantities of old ledgers and photographs were being thrown out for burning. Perhaps the Jackdaw instinct which is present in so many of us has never had a better justification, for the material which he scooped up into the boot of his car literally by the shovelful was nothing less than the results of early development work on that Lincoln invention the tank!

The subsequent cataloging work helped Eric spend his time during the cold winter months most fruitfully and the Museum of Lincolnshire Life now has the results of that labour.

The climax of this rescue came just a few weeks before his death when a television programme produced by BBC North told of the early work which led to the production of 'Mother' and 'Little Willie' by Fosters of Lincoln. These were the first tanks as we know them and history was made in Lincoln. I know of no greater pleasure than seeing the name 'Eric Clipson' on the credits for that programme.

During this time he never neglected his first love the Lincolnshire countryside. He was always keen to pass on his enthusiasm and gave numerous illustrated talks to such varied groups as the Foster-Gwynnes

retired group and the local children in his area. It goes without saying that he was in constant demand by the programme organisers of all the natural history bodies in the county.

I know that we all felt his loss very deeply, particularly because it was so unexpected but I know that Eric would not wish us to view his passing with tears (although we did) but to be thankful for the good things in life and further the cause of those things which he cherished. I cannot find words to better those of the hymn sung at his funeral 'All Things Bright and Beautiful'.

Thankyou Eric, we shall not forget....



Shortly after the above was written we heard of the sad death of Eric's widow. Joyce had been a constant companion and both she and Eric were often seen on Union activities. Those of us who knew her had seen her struggle with all the problems associated with widowhood and just as it appeared that a new life was about to begin tragedy struck for the second time. I am sure that all members will join with me in expressing deep sadness at this further blow to the Clipson family.

WHO NEEDS THE WASH?

F. M. Aungier

Introduction

The Wash covers about 240 sq. miles and on the lowest tides about 130 sq. miles of saltmarsh and mudflat are exposed. This intertidal area is an extremely important wildlife habitat and a great deal of research on both physical and biological processes within estuaries has taken place in the Wash. Bordering some of the most intensively cultivated land in Britain, the Wash marshes and mudflats are difficult and even dangerous to travel over, lonely and beautiful. Paradoxically they are now almost continuously threatened by various development schemes.

The most ambitious one to date, a complete barrage to form a freshwater reservoir, was put forward in the mid 1960s, was later modified to a series of smaller bunded reservoirs; and following intensive study of the Wash systems in the early 1970s plans were shelved. However, as a result of this study and preliminary results from the Birds of Estuaries Enquiry, conservationists became concerned that the enclosure of relatively small areas of saltmarsh around the Wash for conversion to arable land was causing permanent damage to plant and animal populations of national and international significance.

Value of the Wash for nature conservation

The Wash is of outstanding importance for wildlife, particularly as a feeding ground for migratory birds in winter. It qualifies as an area of international importance for waterfowl under all four possible criteria laid down at the Fifth International Conference on the Conservation of Wetlands and Waterfowl at Heiligenhafen in 1974, and it satisfies the scientific criteria for inclusion in the list of sites designated for special protection under the Ramsar Convention in 1971 (although for political and administrative reasons it has not been so designated). Only three other areas in Europe (the Waddensee, the Bassin d'Arcachon and Morecambe Bay) regularly support more interesting waders than the Wash and it is also the most important wintering area in Europe for Shelduck. 48% of the European population of Grey Plover utilize the Wash in late autumn, and it regularly holds over 5% of Europe's winter populations of Grey Plover, Knot and Bar-tailed Godwit and over 5% of the British wintering populations of Dunlin, Oystercatcher and Redshank. Internationally important numbers of three species of wildfowl (Shelduck, Pink-footed Goose and Brent Goose) also occur.

3,670 hectares (about 14 sq. miles) of "green" saltmarsh is found in the Wash, which represents over 11% of this habitat in England and Wales. Although as a result of repeated removal of the upper levels of the marsh through enclosure for agriculture species-rich saltmarsh is uncommon on the Wash, the very large area makes the Wash marshes important. Substantial numbers of Redshank, Skylark, Shelduck, Meadow Pipit, Reed Bunting, Black-headed Gull and Common Tern breed on the Wash marshes and in winter the saltmarsh plants are important as a food source for small birds. 67% of the Twite wintering in Britain do so on the Wash, along with Skylark, Greenfinch, Goldfinch, Rock Pipit, Meadow Pipit, Starling, Linnet, Reed Bunting, Corn Bunting, Snow Bunting, Lapland Bunting, Shore Lark and Yellowhammer. These birds themselves provide

food for birds of prey, including uncommon species like Hen Harrier and Merlin. The birdlife of the Wash is under constant observation. Much less is known about the terrestrial invertebrates of the Wash saltmarshes but where surveys have been carried out a considerable range of unusual species totally dependent on the saltmarsh habitat have been identified.

Loss of habitat on the Wash

Until recently it was thought that enclosure of upper marsh for arable had only a temporary effect on the intertidal area. Mature species-rich upper marsh was destroyed, but new green marsh quickly developed beyond new sea banks and gradually matured. It was assumed that as the front of the green marsh moved seawards the intertidal mudflats beyond responded in the same way - that is, low water mark moved seawards when high water mark was pushed out by the new sea bank, so the slope of the shore and the area of both green marsh and mudflat remained more or less constant.

However it is now realised that even were this to happen the total area of the Wash would be reduced, meaning a smaller shoreline. The Wash is now about half the size it was in Saxon times before the first agricultural enclosures had taken place. More worrying, this loss of habitat has speeded up recently. About 2,591 hectares (roughly 10 sq. miles) of saltmarsh have been enclosed and drained in the last 30 years, proportionately more (over 1,000 ha.) in the last decade. At this rate saltmarsh will normally be reclaimed before it is 100 years old, far too early for the full range of plants and animals characteristic of mature saltmarsh to colonise. Still more alarming, measurements of the first Admiralty Chart (dated 1828) and subsequent charts have shown that the position of low tide level has not changed substantially although high tide level has been moved seawards as successive sea banks have been built. The shoreline must therefore be steepening, and the total intertidal area (saltmarsh and the mudflats on which the birds feed) has been reduced from 432 sq. km. (167 sq. miles) in 1828 to 344 sq. km. (133 sq. miles) in 1973, a loss of over 20%.

These changes in the Wash cannot be viewed in isolation. Migratory birds move between the Estuaries of Europe throughout the winter, selecting particular places at particular times. For instance, ringing returns have shown that most of the Knot breeding in Canada and Greenland winter in Western Europe, but while some of these birds arrive on the Wash and nearby sites in late July and moult here, moving north in October to the Humber, Tees or Forth, other Knot moult on the Waddensee and move to the Wash in November. In February most Knot leave the Wash for other estuaries (often Morecambe Bay or the Waddensee) to build up fat reserves for the spring migration. Loss or deterioration of any one of these feeding sites may put the whole pattern (and the whole bird population) in jeopardy. Less mobile species, such as saltmarsh plants and insects, are equally vulnerable; loss of a seed source or a food plant for a single season may mean an area is never recolonised. Most European estuaries are now in danger - from industrial construction, waste tipping and land generated or sea-borne pollution as well as from enclosure of saltmarsh for agriculture.

Planning decisions on saltmarsh enclosure

The long term adverse effect of enclosure of saltmarsh on wildlife

has only recently been recognised, so until a few years ago most "reclamation" schemes on the Wash proceeded unchallenged. However in 1978 planning permission was sought for the construction of sea banks to enclose about 80 hectares (200 acres) of marsh at Gedney Drove End, and objections led to a public inquiry. Those opposing the scheme argued that the Wash was of outstanding importance for wildlife; that enclosure of saltmarsh would result in immediate loss of upper marsh habitat and ultimate permanent loss of mudflat; and that this loss of habitat would have a damaging effect on internationally significant bird population. Those proposing "reclamation" argued that any loss of intertidal area following bank construction results from a natural silting up process which may be accelerated but is not primarily caused by the new banks; that enclosure has gone on for centuries and the Wash is still important for wildlife; and that the economic and social advantages of winning high-quality agricultural land from the sea outweigh any damage that may be caused to some of the native plants and animals. After studying the Inspector's report, the Secretary of State concluded that "despite the very strong case for adding to the nation's stock of high quality agricultural land, a sufficiently exceptional need has not been established in this instance to justify the encroachment on an area of national and international importance to conservation and that therefore ecological and scientific considerations should prevail."

Since this decision was taken, a number of other proposals for construction of sea banks around the Wash have been made, and challenged. Considering each on its own merits is not proving satisfactory. The decision procedure is slow and complicated, especially since there is some doubt whether planning permission is normally needed for constructions to facilitate drainage and ploughing of land already used for agriculture (i.e. grazed saltings). The whole problem has now been brought to the attention of local and central government bodies. The future of the Wash now lies in their hands, but their decisions are based on the advice of appropriate experts and local people.

Marshalling the facts

The decision-makers have of course been deluged with advice from many quarters. This has not always been easy to substantiate, but there is no doubt about the following important points:

1) The Wash plays a vital role in the support of internationally significant populations of wildfowl and wading birds. It is also one of the most important habitats in Britain for a much wider range of birds, animals and plants.

2) The area of intertidal habitat available to these species within the Wash has been greatly reduced in historic times, this reduction is accelerating, and appears to be the direct result of repeated enclosure of upper levels of saltmarsh.

3) Evidence from other estuarine systems shows that the intertidal habitat is normally fully utilised by wildlife, at least in some seasons, so reduction of habitat on the Wash will mean death for some individuals (although not necessarily on the Wash). There is no empty space where birds displaced from the Wash can go; everywhere they compete with others for food.

The drainage of saltmarsh on the Wash is therefore depleting wildlife populations over a much greater area than the enclosures themselves. On the other hand, despite the large amount of research already carried out on the Wash and other European estuaries, the physical and biological processes involved are not fully understood. Lincolnshire County Council's draft Subject Plan for the Coast suggests a five-year moratorium on construction of new sea banks to allow further evidence to be collected and assessed, but some people are opposed to even this short breathing-space. Whether or not this moratorium is imposed, regular monitoring of wildlife must be continued and measurements and surveys initiated and repeated on the Wash and other estuaries until we understand more about the links between the enclosure of saltmarsh on the Wash the loss of intertidal mudflat and the needs of wildlife populations. Only then can we feel confident that a reasoned choice between "birds and barley" can be made.

Further reading

These key works may be helpful to those interested in particular aspects of the Wash problem. Unfortunately a great many useful documents (e.g. proofs of evidence at Gedney Inquiry) remain unpublished.

Central Water Planning Unit, 1976. The Wash Water Storage Scheme Feasibility Studies, especially Scientific Studies.

Lincolnshire County Council, 1980. Draft Subject Plan: Development on the Lincolnshire Coast.

Prater, A J, 1981. Estuary Birds. T & A D Poyser Ltd., Staffs.

REPORT OF HON. GENERAL SECRETARY 1981

Your Executive Committee met 5 times during 1981 with a full agenda for each meeting. Finance was discussed at every meeting, with the Hon. Treasurer providing reports on the state of the party each time. Having, perhaps, second sight as to the severity of the impending wintry weather, Miss Garlick went on a visit to New Zealand in November, but not before she was satisfied as to the security of the Union's finances. We are confident that she will be just as satisfied on her return. This year for the first time we have been able to get the audited Balance Sheet out to members with notice of the Annual General Meeting so that all members have had a chance to consider it in detail.

It is pleasing to note that in 1981 the Union did the impossible. We had been told that there was no hope of our ever being able to publish two issues of Transactions within one year - but we have done just that. Now that the sequence is up to date we can continue a normal annual publication without worry. Vol. XX No.1 was the last under the editorship of Mrs. Anne Goodall. Her place has been ably filled by Mr. John East, backed up by our Editorial Board which replaces the former Publications Sub-committee. Help was given by a number of people, notably Dr. Fiona Aungier of the Nature Conservancy Council and Mr. Andy Burton of Lyne Printers.

We do not expect to see the Union as a pressure group but occasionally matters of conservation interest arise on which we have information which should be taken into account by the responsible authorities. Such a matter arose regarding the Wash, a wetland area of international importance, which in our view should not be managed as a matter of local decision only. The Union had been invited to comment on the Draft Subject Plan for Development on the Lincolnshire Coast, prepared for the Lincolnshire County Council by its Planning Department. This eminently sensible and reasonable document proposed among other things, that no planning permission be given for 5 years for reclamation of the Wash salt marshes and that there should be no reclamation at all of the more northerly saltmarsh. It was hoped that during the 5-year moratorium there could be a better assessment of the natural forces at work in the Wash, the effects of tidal flow, sedimentation and accretion, from which it would be possible to decide on a wise policy for the long-term future. The LNU emphasised the importance to wildlife in an international context of the mature saltmarsh which would be lost to reclamation, quoting records of species peculiar to this habitat. When the Draft Subject Plan was due to come before the County Council for adoption early in 1982, it came with a recommendation from the Policy and Resources Committee to the effect that reclamation of the Wash should be encouraged. Happily the full County Council rejected this recommendation and reinstated the original clause in the plan. This, of course, is not the end of the matter since a) there are ways of getting round the need for planning permission and b) the plan has still to be accepted by the Secretary of State, but it does provide a breathing space in which to collect more evidence regarding the wildlife of the Wash. It is hoped that all members of the Union will endeavour to do this, submitting their records to the Sectional Secretaries.

Requests for records for a number of sites within the County have been received, particularly from the Lincoln Group of the Lincolnshire and S. Humberside Trust for Nature Conservation. A list of sites is being sent to all Sectional Secretaries.

A competition for an emblem to represent the Union produced so few entries that the Committee felt that it would be invidious to award a prize. Since then Annette Binding has produced for us a number of possible designs, one of which displayed at the Annual General Meeting found general approval.

With the help of Richard Coupar I am preparing a catalogue of the LNU library holdings.

Thanks are due to many who have helped the Union during the year:-

To the Director of Museums and Art Galleries for allotting us space in the Museum's tent at the Lincolnshire County Show.

To Nottingham Building Society for giving us the use of their window in the Cornhill, Lincoln for a month for display.

To our own members: particularly to Mrs. Pennell for holding the fort for the Hon. Treasurer during the winter as well as for energetic salesmanship of LNU publications and for keeping us in the public eye. We wish her a speedy return to complete health following recent illness.

To Mr. Ken Rowland for his unobtrusive and efficient work at indoor

meetings on the projector and in preparation of material for display. He uses his own equipment, keeping it in reserve even when the speaker proposed to use his own - and Ken's forethought has been fully justified during this last winter.

To the retiring Programme Secretary, Mrs. Mary Giles, who has not only pushed through interesting and informative programmes during a 3-year stint but has also worked untiringly to smooth field meetings by arranging Do-it-yourself teas in Village Halls, aided by hard-working Field Secretaries, to whom also we would express our great appreciation.

To all the Officers and Members of the Executive Committee I should like to express my thanks for their help and support during a busy year.

Norah Goom

FIELD SECRETARIES' REPORT

Twelve general field meetings were held last summer, with an average attendance of about 32 members, an increase of over 50% on the 1980 summer meetings. Again northern and southern venues proved equally popular. The weather for field meetings in 1981 was a great improvement on the previous year.

Dr. Seaward led our first meeting at Twigmoor on 19th May. A good attendance of 48 members welcomed Scunthorpe Museum Society Naturalists who joined us on this occasion. Tea was taken at Hibaldstow, self catering by members.

The first meeting in the South was held at Kirton Wood, Ropsley, on May 23rd. This is a Grade II SSSI of good mixed woodland, but poorly drained, so that conditions underfoot were very muddy. 9 fallow deer were seen.

Miss Gibbons' botanical meeting on May 27th was held at Doddington Hall. We were pleased to welcome the owner Mr. Jarvis and the local member of Parliament.

Sadly our President who was to lead the meeting at Far North End Wood on June 6th, had died a short time previously. The meeting was led instead by Mr. John East. Tea was arranged at Langworth.

The 14th June provided a warm day for the Haverholme Priory meeting, where Comfrey abounded in a variety of colours, the members were pleased to find quite a quantity of Meadow Rue.

Mr. Philip Grimes, the Agent for the Ancaster Estates, led us round the Glen Valley on July 5th - another warm day. It was sad to see the large number of elm trees already dead and to learn that they all have to be felled. This has led to the disappearance of the White-Letter Hairstreak butterfly, which formerly bred there.

On July 11th another Survey meeting was held at Hartsholme Country Park by invitation of the Ranger. It was another very warm day. A pipistrelle bat was seen on the trunk of a tree in bright sunshine.

A geology meeting on July 18th at South Ferriby Quarries was led by David Robinson this was less well attended than usual possibly because of the greater distance involved for many members. The flora was appreciated as much as the rocks. Tea was taken at the Lakeside Hotel, which was not as bountiful as self-catering.

On August 1st we met at Burwell Woods. This had a better attendance of 33 members, who enjoyed the hot sunshine. Self catering was again the order of the day.

Elliott's Wood was our venue on August 9th when the cold, drizzly weather reduced the attendance to 22 members. This is a primary ash/elm/oak woodland, on clay soil, which makes for very wet walking.

Yet another hot day at Hubbards Hills on September 6th brought out the crowds. Families picnicking and children paddling, it was quite a busy place. We too had a picnic tea which I hope was enjoyed by all.

The field season concluded on a high note with an excellent Fungus Foray at Callan's Lane Wood on October 17th where Mr. Jack Houghton was delighted to have 115 species to record.

On the 3rd November we held our first indoor meeting of the 1981/2 season at Spilsby, where Mr. Peter Skelton spoke on "The Natural History of Switzerland". There was a very poor attendance for this most interesting and enjoyable lecture, which was arranged jointly with the Spilsby Group of the Lincs & South Humberside TNC. Our other "away" meeting, at Pinchbeck on March 9th proved much more successful, when Mr. Derek Wells came to speak on "The Conservation of Fen and Limestone Plants".

At Bishop Grosseteste College, we have also enjoyed some excellent lectures, starting with Mr. Colin Howes, who spoke on "What the Cat Brought In". The visit of Dr. George Peterken to talk on "The Historical Ecology of Lincs Woodlands" attracted an audience of 90, and in February John Nullis provided another popular lecture on "The Importance of the Work of the Lincolnshire Farm and Wildlife Advisory Group".

This year our Annual General Meeting was held at the Lincolnshire College of Agriculture, Riseholme, and afterwards a big audience heard a Memorial Lecture, for the late President, Mr. Eric Clipson. This was given by the well-known broadcaster on natural history subjects Dr. Jim Flegg. His theme was 'Birds and Man', and it made a fitting tribute to Eric - it was just such ecological problems that he studied so keenly.

In conclusion may we thank all those who helped with arranging meetings, and last, but not least, all those who have so kindly provided delicious fare for the teas at the summer de-briefing sessions.

Mary Giles
Violet Wilkin

SECTION OFFICERS' REPORTS

GEOLOGY

D. N. Robinson

Exploration work in connection with the underground LPG Storage Project at South Killingholme has added to knowledge of subsurface chalk formations. Cores have been taken and logged from drilling. Approximately 20m of superficial deposits overlie 10m of weathered material; the Burnham Chalk is about 145m thick followed by the Welton and Ferriby Chalks, with the Carstone at 210m. Investigation was also made of the 'Kirmington fjord' - an interglacial valley in the chalk. Information has been obtained about dip, jointing, permeability and hydrogeological conditions - vital in a scheme which relies on water pressure for containment of the gas in caverns to be excavated at a depth of around 180m.

BOTANY

E. J. Gibbons

A disappointing spring and not many encouraging days for botanising but several exciting plants were found later in the season which hadn't been recorded before or had been thought to be extinct.

The first field meeting at Twigmoor (to make up for the drenching rain in 1979) produced no additional records.

At Kirton Wood, Ropsley, we were rewarded, after a hazardous drive down a muddy lane (how no-one got stuck was surprising), by a delightful mass of Wood Forget-me-not, much small leaved lime and midland hawthorn.

At Doddington, we were met by Mr. Anthony Jarvis, who owns and knows the area well. Mr. Jarvis took over the leadership and we visited Birch Spring Wood, Donkey Field and Old Hag Wood. Birch Spring was colourful with Bluebells and yellow Archangel, Donkey Field yielded Adder's Tongue and a number of sedges, Old Hag Wood had been well worked in the past but unfortunately rain came down heavily and curtailed the meeting. Here Herb Paris, Moschatel and Wavy Bitter Cress were noted and very large trees of small leaved Lime were used for shelter. Wood Speedwell, Sweet Woodruff and Twayblade were also seen. It was too early for Wood Barley Grass which had been recorded in 1958 and previously in 1858. Canon Cole made an extensive plant list for Doddington in 1858 which was referred to.

Far North End Wood, Bullington, was very pleasant, but we were very sad that Mr. Clipson our President who was to lead the meeting had died only a few weeks before. Mrs. Clipson and family nobly came and took his place. Greater Butterfly Orchids were plentiful, Yellow Archangel, Bluebells, Greater Stitchwort, Adder's tongue and other woodland plants were most colourful. The two grasses Wood Melic and Wood Millet were recorded.

Haverholme was a different habitat with fen relics. Notable amongst the wet marshy areas were Comfrey in a variety of colours, Yellow Flag

Iris, Ragged Robin and Common Meadow Rue. The pink Water Speedwell attracted a good deal of attention. The Comfrey was reported in 1969 by Dr. Perring to be the hybrid swarm of Symphytum officinale subspecies ochroleucum x purpureum (see Flora p. 195).

The Glen Valley at Swayfield had limestone plants and a surprise was Meadow Rue, which had not been found there before. The valley had been surveyed in 1726 by Dr. Vincent Bacon and again in 1955 by Mr. Chandler for the Atlas; also by myself in 1967.

Hartsholme Country Park was a survey meeting by invitation of the Ranger, Peter White. Many ferns were recorded including Royal Fern, Polypody and Hard Fern. Lemon-scented Fern was recorded by Mrs. Weston at a later date. It was interesting to see the large amounts of Sphagnum and Polytrichum moss through the wet birch woodland. Sieglingia and Nardus were two of a large number of grass species recorded.

South Ferriby. We were rewarded with a really fine day. David Robinson gave a very clear explanation of the chalk and Kimmeridge clay in the newest quarry and we then explored two other quarries and part of the Humber bank. One quarry was quite remarkable for the amount of ripe wild strawberries which showed up against the white chalk. There was a lot of Prickly Lettuce, Sand Rocket and Eyebright. The Yellow Bird's Nest previously recorded in the beech wood in 1959 and 60 was searched for, but it tends to appear only temporarily. Tea was held in view of the new Humber Bridge.

Burwell Wood It was also a fine day. Giant Bellflower was at its best and Wood Millet, Wood Sorrel, Wood Pimpernel and Great Woodrush were also recorded.

Elliott's Wood A nice primary wood. There were no fresh records but 104 plants were listed.

Hubbard's Hills This was more a Geological than Botanical meeting and there were no fresh records.

Callan's Lane Wood, Kirkby Underwood In spite of the late date there was plenty of plants listed including new records for Cow Wheat and Alder Buckthorn. Broad-leaved Helleborine and Nettle-leaved Bellflower both recorded previously, were noted.

A list of plants of railway lines was made in 1977 by the Nature Conservancy Council, but did not reach me until 1981. There were no records from S. Humberside except from Immingham Docks. New records were mostly omissions of common weeds and grasses which had escaped notice. Southern Marsh Orchid and Stone Parsley from the Louth area were unexpected. 50 plants were recorded in 19 squares, there being 95 records in all.

New Records for 1981

NCR	Crassula helmzii	15	E. Pearce	Confirmed Perring
NCR	Epipactis dunensis	1	J. Gibbons	Confirmed Knight and Richards
NCR	Festuca longifolia	6	I. Weston)	
NCR	Festuca rubra ssp. pruinosa	6	I. Weston)	Confirmed Trist

NVCR	<i>Polypodium interjectum</i>	9	T. Clifford	Confirmed
				R. Roberts
NDR	<i>Apera interrupta</i>	2	A. Goodall	Confirmed Trist
NDR	<i>Epipactis helleborine</i>	1	G. Trinder	1980
NDR	<i>Scirpus tabernaemontani</i>	1,2,5	J.G.	Confirmed I. Weston
NDR	<i>Vaccinium oxycoccus</i>	1	V. Wilkin	

Plants Refound

<i>Drosera intermedia</i>	5	G.S. Phillips
<i>Drosera rotundifolia</i>	5 & 10	
<i>Epipactis purpurata</i>	15	M. Pool (late record 1980)
<i>Petroselinum segetum</i>	15	I.W.
<i>Pilularia globulifera</i>	2	V.W.
<i>Pyrola minor</i>	18	M. Game

MYCOLOGY

H. J. Houghton

The vagaries of the English weather provided a mixture of conditions this year, and mycological activity naturally followed suit. Spring was late and cold, summer was a mixture of dry spells and rain, and the autumn was wet and warmish. Just after the annual Foray, we had a succession of early morning frosts and a cold spell, followed in November by very hard frosts terminating in snow and ice for most of December. However, in the main it proved to be a bumper year for fungi, as the following examples will testify.

10.5	Twigmoor Warren	18	Species recorded	No new records
23.5	Kirton Wood, Ropsley	21	"	9 records for SK93
6.6	Far North End Wood	13	"	1 " " TF07
	Newball Wood	19	"	11 " " TF07
5.7	Glen Valley	9	"	4 " " TF02
12.7	Hartsholme Park	28	"	28 " " SK96
1.8	Burwell Woods	32	"	14 " " TF38
6.9	Hubbards Hills	6	"	3 " " TF38
17.10	Foray at Callans Lane			
	Wood	120	"	44 " " TF02

All the above records were during the normal meetings of the Union. Twigmoor Wood and Warren have been very well worked previously and the weather was wet and cold. Conversely, the Kirton Wood meeting was almost abandoned before it started because of heavy rain, but it was fine for the meeting. The main "find" was quite a number of Entoloma clypeatum under an old hawthorn hedge. Far North End Wood was very thick in undergrowth, but produced the smut Ustilago violacea in the heads of Pink Champion, and a very short visit to the neighbouring Newball Wood produced 9 myxomycetes, including a mixed up gathering of Physarum nutans and P.leucophaeum. Conditions were very dry indeed for the Glen Valley and Hubbards Hills meetings and specimens were very few and far between. Hartsholme was as usual a productive area even in July, and from nearby, specimens of the rare Leccinum roseofractum were handed to us. (These were kindly identified by Dr. R. Watling, of Edinburgh Royal Botanic Garden). Burwell Woods included the smut Urocystis anemones on wood anemone and 4 myxomycetes in its flora.

The year's highlight was of course the annual foray, held at Callans Lane Wood in TF02, by permission of the Forestry Commission. The large 'bag' of 120 species included two new county records - Thelephora palmata among conifer needles and the tiny clavarioid Clavicornia taxophila on wood, as well as 44 species new to TF02 and 34 new site records, despite numerous meetings and two forays (in the first decade of the century and in 1960) held on the site. The collections included 7 species each in the Clitocybe and Collybia genera, 13 Mycena, 10 Lactarius (but only 4 Russula), and other rarer finds were the bitter tasting Cortinarius causticus, a compact group of Lentinus cochleatus, the tough Lentinus lepideus, a large group of Lyophyllum fumosum under conifers, the soapy Tricholoma saponaceum, and the polypores Meripilus giganteus and Polyporus badius. The meeting was very well attended as usual, and it was rewarding to have all the members in the County who have a mycological bent present.

A larger number of records (County and otherwise) than usual have been entered this year, and a list of new County records is given below. In view of the transfer from the 18 Divisions to the 10 Km square grid system of over 90 Divisions, we are naturally short of records for many squares, and it will be some years before we have an adequate picture. In the meantime many of these records are being added - this year we had over 300 additions, for example - and it is not practical to list them here.

Apart from the Union's normal meetings, new or interesting specimens have been produced by sundry members on many occasions. Mr. K. Rowland provided, among many others, a cutting from a juniper tree on Kirkby Moor bearing specimens of the red and yellow cup fungus Pithya cupressina, another specimen of Agaricus augustus from his garden (this specimen weighted 1lb when gathered and was loz only when dried!) and some tiny Mycena polyadelpa on oak leaves, also from his garden. Mr. J. Rowe and his wife again produced many specimens from various locations, including Cortinarius pseudocrassus from Woodhall, Cortinarius glandicolor and Armillaria tabescens from Skellingthorpe, and Phaeolus schweinitzii from Burton Pits. Mr. Brazier brought in a number of Gasteromycetes during the year, including a fine specimen of Calvatia utriformis from Hibaldstow, and Mrs. D. Hallewell sent in a specimen of the myxomycete Enteridium lycoperdon which she had found fruiting on her window surround in Grimsby.

Thanks are due to a number of people who continue to give us assistance in identification of species. Miss G.M. Waterhouse, although not able to attend meetings, still identifies or has identified any specimens sent to her and acts as referee. Several specimens have been identified by Dr. D. Reid and Dr. B. Spooner of the Royal Botanic Gardens, Kew, and others by Dr. R. Watling of the Royal Botanic Garden, Edinburgh. Myxomycetes have been identified for us by Dr. B. Ing, of Chester College. To these we extend our sincere thanks.

List of New Records for Lincolnshire

(1) From the Annual Foray at Callans Lane Wood (TF02)

Clavicornia taxophila (Thom) Doty
Thelephora palmata (Scop.) Fr.

(2) Other new County Records

- **Peziza badioconfusa* Korf from Laughton Forest SE80
 **Otidea bufonia* (Pers.) Boud from Laughton Forest SE80
Lepiota oreoformis Vel. from Kirkby Moor TF26
 ****Leccinum roseofractum* Watling from Hartsholme SK96
Hypholoma marginatum (Pers. ex Fr.) Schroeter ex Laughton Forest SE80
Agrocybe paludosa (J.Lange) K. & R. ex Laughton Forest SE80
 **Lepiota echinacea* J. Lange ex Laughton Forest SE80
Mycena polyadelpa (Lasch) Kühn. ex N Hykeham SK96
Pithya cupressina (Fr.) Fuck. ex Kirkby Moor TF26
Polyporus ciliatus Fr. ex Fr. ex Woodhall TF15
Ciboria batschiana (Zopf) Buchwald ex Woodhall TF15
Tricholoma virgatum (Fr. ex Fr.) Kummer ex Woodhall TF15

- * - Identified by Dr. B. Spooner, RBG, Kew
 ** - " " Dr. D. Reid " "
 *** - " " Dr. R. Watling, RBG, Edinburgh

ATLAS OF THE MAMMALS, REPTILES &
 AMPHIBIANS OF LINCOLNSHIRE &
 SOUTH HUMBERSIDE

by

Maurice Johnson, FZS



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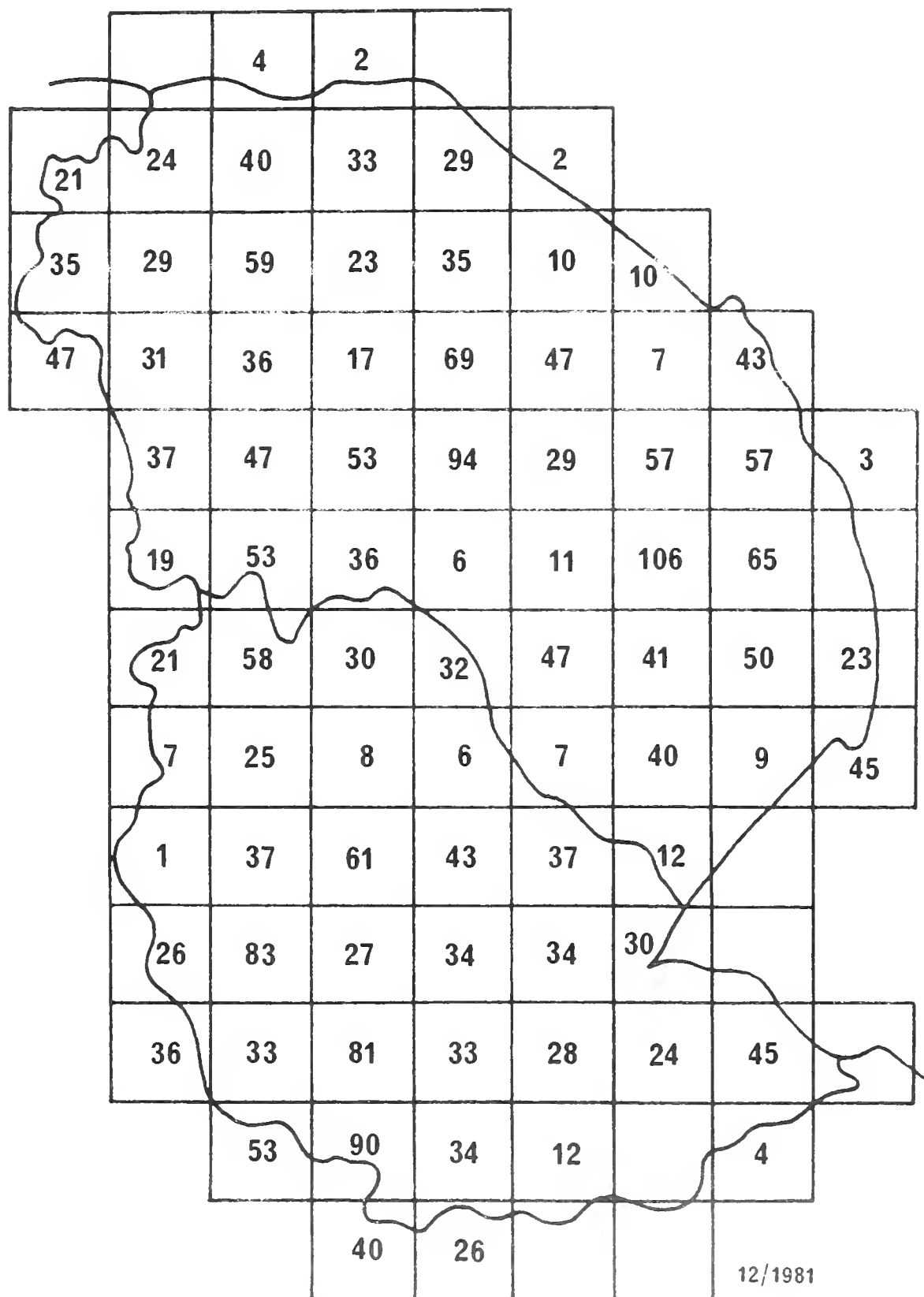
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LICHENOLOGY

M.R.D. Seaward

The programme of 10 km x 10 km grid square mapping of Lincolnshire lichens continues: the map below summarises post-1960 recording and shows the advances made since the last analysis prepared for this journal (Trans.Lincs.Nat.Un. XIX: 68). There are now, on average, more than 30 records per grid square (although 28 squares still have less than 20 records), showing a 25% increase in recording over the past five years.



However, those Lincolnshire squares which do not include areas of any adjacent county have more than 34 records; although this figure is considerably lower than the average of 70 for the British Isles, it is nevertheless quite typical of eastern agricultural counties experiencing moderate levels of wind-borne air pollution emanating from westerly urban and industrial areas.

Mainly as a result of the author's fieldwork in 1981, the following additions have been made to the Lichen Flora of Lincolnshire (M.R.D. Seaward, 1980):

Cetraria chlorophylla (Willd.) Vainio add 2

Chaenotheca ferruginea (Turner ex Sm.) Mig. add 2

Cladonia cryptochlorophaea Asah. Turbary, Haxey (div.1), June 1980, M.R.D. Seaward; new county record.

Lecania baeomma (Nyl.) P. James & Laund. add 7

Lecanora albescens (Hoffm.) Branth & Rostrup First record: Lees (1892) as L.galactina. Divs 1-3, 5-8, 10, 12-18. Common throughout the county on a variety of calcareous substrates.

L.atra (Huds.) Ach. add 2

Lecidella stigmatea (Ach.) Hertel & Leuckert add 2

Parmelia glabrata subsp. fuliginosa (Fr. ex Duby) Laund. Gravestone, Doddington churchyard (div.13), May 1981, M.R.D. Seaward; new vice-county record

Platismatia glauca (L.) Culb. & C.Culb. add 2

Pseudevernia furfuracea s.l. One thallus (1.5 cm diam.) on siliceous gravestone, Doddington churchyard (div.13), May 1981, M.R.D. Seaward; vice-county record

Rinodina gennarii Bagl. (= R.subexigua (Nyl.) Oliv.) add 2

Verrucaria glaucina Ach. add 2, 13

V.viridula (Schrader) Ach. add 2, 13

CONCHOLOGY - NON-MARINE

E. J. Redshaw

Dot-maps have now been prepared to show, on the 10 km grid, the post 1950 distribution of non-marine molluscs in Lincolnshire and South Humberside up to 31st December, 1980. Work is now in progress on the text to accompany these maps, which will eventually be deposited with the Union's records.

During 1981, Mrs. V. Wilkin recorded species at field meetings in the northern half of the "county", and produced 33 new 10 km square records, as listed below:

TF/07	Far North End Wood Bullington	Oxychilus alliarius	
TF/07	Washingborough Fen	Acroloxus lacustris Anodonta anatina	Unio tumidus
TF/38	Hubbard's Hills Louth	Pupilla muscorum Cepaea hortensis Nesovitrea hammonis Candidula intersecta Helicella itala Lauria cylindracea Vallonia costata Acanthnula aculeata Cecilioides acicula	Ena obscura Carychium tridentatum Carychium minimum Arion hortensis Deroceras laeve Ancylus fluviatilis Lymnaea truncatula
SK/79	River Idle	Planorbis carinatus Lymnaea auricularia Dreissena polymorpha	Lymnaea stagnalis Valvata cristata
SK/96	Hartsholme Country Park	Ceruella virgata Nesovitrea hammonis Anodonta cygnea	Oxychilus helveticus Anisus leucostoma
SK/97	Doddington Hall	Euconulus fulvus Monacha cantiana	Pupilla muscorum

Dr. C. Extance, Biologist with the Lincolnshire River Division (AWA) has provided for confirmation a specimen of Valvata macrostoma, taken from the R. Bain at Wharf Lane, Coningsby (TF/228586) which is a new Vice County record for V.C. 54. Dr. Extance believes that this species is more widespread than is indicated in the Conchological Society's Atlas (1976), with likely stations in the R. Ancholme, Long Eau, Louth Canal and some of the mid Lincs delphs and fen drains. Voucher specimens are awaited with interest.

I am grateful to Mrs. Wilkin and Dr. Extance for providing the above records for 1981.

LEPIDOPTERA

J. H. Duddington

BUTTERFLIES

The 1981 season was a very poor one for lepidopterists in the County and some felt it was one of the poorest that they could remember. Very few immigrant butterflies were seen, undoubtedly the inclement weather during the spring had an adverse effect on migrants. The rain and snow driven by a strong easterly wind from April 23rd-27th must have accounted for many of the early feeding larvae.

Mr. E. Mason who lives in the Moat House, Lincoln mentions Meadow Browns becoming quite common in his garden. There were also Small Skippers, Gatekeepers, Wall, Orange-tips, Brimstone, Small Tortoiseshells, Peacocks and Red Admirals and in recent years Common Blue and Small Coppers. Mr. Mason has lived in the Moat House for 65 years and taken an interest in butterflies since the age of 7. He is certain that a greater variety of butterflies visit his garden than in his youth despite the extension of built up areas on the boundaries of Lincoln. Personally I think it is a general trend for more species to visit gardens. The Browns will certainly breed there if areas of uncut grasses are present.

Of our immigrant butterflies the Large White wasn't very plentiful. Small White numbers were well down compared with recent years. Orange-tips were widespread. Brimstones were scarce in South Humberside but numerous in South Lincs.

The Meadow Brown was about two weeks late in emerging and the Ringlet was scarce. Mr. R. Johnson observed one at Messingham on the 30th of May, a very early date for this species.

The Wall butterfly after several very poor seasons was quite numerous again, especially the second brood in August. No reports of the Grayling. Its few habitats in the county are disappearing under the plough.

Mr. Rex Johnson and I visited Crowle Waste at the end of June to observe our only colony of the Large Heath, they were quite numerous but this rare sub-species could be in danger according to a Yorkshire lepidopterist. The Author mentions in a small book on Yorkshire lepidoptera that a Lincolnshire collector had taken 100 Large Heath in one season from Crowle Waste.

Gatekeepers were quite numerous along hedgerows, verges and wood-sides. The Speckled Wood can still be seen in the larger Woodlands of Central and South Lincolnshire.

Four species of Skippers were recorded, Large Skipper numbers below average, Small Skipper numerous, Grizzled and Dingy Skipper plentiful at Bardney and in the South Kesteven Woodlands but not seen in South Humberside. The Small Copper had a good second brood and the Common Blue was widespread but only in favoured areas was it plentiful.

It is several years since I have received a record of the Holly Blue but this season one was observed at Alford by Mr. R.E.M. Pilcher.

Four species of Hairstreak have been recorded, the rare and rather secretive Brown Hairstreak appears to be doing well in the Bardney and South Kesteven Woodlands and the Purple Hairstreak is quite numerous where there is plenty of Oak. Green Hairstreak is still found on the East Coast; Mr. A.E. Smith observed a female ovipositing in Little Ham Wood on birds foot trefoil. The White Letter Hairstreak was never recorded every year, and since the larval food plant is Elm, it will be interesting to see if the species can survive the loss of so many Elm Woods. I have only received one record from a wood south of Grantham.

After a long period without sightings of Fritillaries two singles have been seen. Mr. G. Posnett observed a High Brown Fritillary in Temple Wood and Mrs. F. Aungier sighted one in Skellingthorpe Wood which was not identified.

A success story, the White Admiral, is doing well in the Bardney Woodlands and has been sighted in several South Kesteven Woods. Another infrequent butterfly the Comma has been observed in fair numbers in the South Lincs Woodlands.

The Vanessids sighted were the Peacock (which was plentiful), Small Tortoiseshells (common in September) and Red Admirals (fair numbers in the autumn). Mr. F. Brasier charted numbers of these species on Buddleia in his garden. After the first week of September no Peacock were recorded, they probably went into early hibernation. The other two species Red Admiral and Small Tortoiseshell visited Buddleia and fruit until the middle of October. The migrant Painted Lady was in numbers on the East Coast but only odd ones inland.

I had a visit from a schoolboy who had caught a Peacock butterfly on Buddleia in his garden which he said looked rather strange, it was a perfect bilateral gynandromorph; the male side distinctly smaller than the female with colour and pattern normal.

MOTHS

These too have had a poor season, very few turned up at M.V. Light and "sugaring" was again very disappointing, the only visitors appeared to be the Common Yellow Underwing. Obviously a poor year for most moths must mean a good year for others, whether due to decreased competition or a sequence of seasons that just happens to suit a particular species. Notably abundant this last year in the South of the County were The Mouse (A.tragopofinis), The Garden Dart (E.nigricans) and the Angle Shades (P.meticulosa).

The highlight of the season was the discovery of the Light Orange Underwing (Archieams notha) flying vigorously over aspens in a South Kesteven Wood on the 26th March by Mr. A.E. Smith. Our only other record is for Market Rasen in 1911. Lincolnshire is probably its most northerly point in Britain, "South" gives Cambridgeshire. In 1959 I met Mr. T.H. Court, a schoolmaster at De Aston, Market Rasen, the LNU Lepidoptera Sec. in 1944-1946 and a past President. He kindly took me to the early habitat for A.notha. The aspens were present but not the moth.

Mr. & Mrs. Binding sent in a goodly list. The best captures were Dwarf Cream Wave (Sterrha interjectaria) (the only other record for this species is from Gibraltar Point) and the Bordered Gothic (Heliophobus reticulata) which is essentially a coastal species, only casually recorded.

The Clouded Buff (D.sannio), a member of the Tiger family, can still be seen flying over the N.W. heathlands. I have never found the hairy larvae of this species but Andrew Johnson camping in a clearing in Laughton Forest on a frosty week-end in the middle of October observed many small hairy larvae crawling on his tent and the surrounding herbage. They were small Blonded Buff larvae looking for hibernation quarters, no doubt having had quite enough of the frosty weather.

Hawk moths have been scarce, the Eyed Hawk (S.ocellata) larvae were plentiful, several being observed feeding on a Sallow in my garden. Mr.S. Van den Bos reported a Humming-bird Hawk Moth (M.stellatarum) flying over flowers in his glasshouse at Goxhill on the 30th June, may have survived hibernation in such nice warm surroundings. Convolvulus Hawk (H.convolvuli) produced only one record this year from Mr. R.E.M. Pilcher on the 13th August, South Thoresby. Large Elephant Hawk (D.elpenor) moths and larvae were scarce.

Other interesting species

Pinion Spotted Pug (Eupithecia insignata) at Dunholme 7th May (KS)
 Dismal Brindle (Apamea ypsilon) at Dunholme 4th July (KS)
 White-pinion Spotted (Bapta bimaculata) at Washingborough June (AB)
 Empress (Saturnia pavonia) at Scotton 15th May (MB) Bardney (AB)
 Fox Moth (Macrothylacia rubi) at Scotton Common 3rd June (JHD)
 Lead Coloured Drab (Orthosia populeti) Larvae 27th May Doddington (JHD)
 Lime Hawk (Mimas tiliiae) at Barton 12th June (SB)
 Dwarf Pug (E tantillaria) at Broughton 18th June (JHD)
 Dotted Rustic (Rhyacia simulans) at S. Thoresby 19th Sept. (REMP)
 Stout Dart (Spaelotis ravidata) at South Thoresby (90 in Moth trap) (REMP)
 Chimney Sweeper (C dezia atrata) at Normanby le Wold 21st June (many CB)
 Marbled Brown (Drimonia dodanaea) at Linwood 4th July (JHD)
 Four Dotted Footman (Cybosia mesomella) at Linwood 4th July (JHD)
 Blackneck (Lygaphila pastinum) at Crowle Waste 8th July (RJ & JHD)
 Forester (Procris statices) at Hartsholme Park 11th July (RJ) Scotter C (JHD)
 Orange Underwing (Archiearis parthenias) 9th April Greetwell (JHD)
 Orange Sallow (Tibiacea citrage) at Normanby Park 11th September (RJ)
 Red Underwing (Cotocala nupta) at Covenham St Mary 25th September (KW)
 Marked White Spot (Lithacodia fasciana) at Linwood 4th July (JHD)
 Spring Usher (Erannis leucophalaria) at Hatton Woods 7th February (AES)
 Angle-striped Sallow (Enargia paleacea) at Scotton C 22nd August (JHD)
 Wormwood Shark (Cucullia absinthii) at Scunthorpe October Larvae (JHD)
 Birch Mocka (Cosymbia albipunctata) at Linwood 4th July (SB)

In concluding my report I should like to thank all members who have sent me their observations during the year: Mr A.E. Smith, Mr R.E.M. Pilcher, Mr R. Johnson, Mr E. Mason, Mr J. Redshaw, Mr F. Brasier, Mr G. Posnett, Mr & Mrs A. Binding, Mr J. Lamin, Mrs C. Brant, Mr G. Wilson, Mr K. Saville, Mrs F. Augier, Mr M. Barke, Andrew Johnson, Lincs. & South Humberside Trust for Nature Conservation, Mr S. Van den Bos, Mr A. T. McGowan.

VERTEBRATE ZOOLOGY

M. Johnson

The highlight of the year was a report by Dr G. Eley about the finding of a hibernating dormouse in the garden of his house near Belvoir. The mouse was discovered asleep in a nest which was uncovered during the tidying of dead leaves from around some beehives during February.

On 27th a visit to Ponton Wood revealed numerous signs of Fallow Deer and a dead Fallow Deer buck was found by the roadside, presumably killed by traffic.

As part of the Water Vole Survey reports were received from a number of localities including Bardney Forest, Washingborough, Panton, Ashby, and Fiskerton. At the latter site nestbuilding activity was seen.

Pipistrelle Bats were reported from a colony at Welton where the creatures were using a site under wall tiles above a house window. A juvenile Long-eared Bat was found dead at Alford and a freshly dead Long-eared Bat was found at Holton Beckering with a freshly taken Heart and Dart Moth firmly gripped in its jaws.

Frog spawn was found in a pond near Kirkby on March 24th and toads were seen gathering to spawn in a pond near Burwell on March 20th. Frog spawn was also recorded from the site.

Grass snakes were reported from Stainfield and Ashby and adders from Woodhall Spa. Common lizard was recorded from Woodhall and Burton Pits near Lincoln.

ORNITHOLOGY

E.J. Garlick

Sixteen field meetings were held during 1981. The year opened with a highly successful meeting at Belton Park attended by 24 members. 45 species of bird were recorded in the varied habitats. Several members had their first sight and sound of Nuthatch - at least 7 were present, also excellent viewing of Green and Great Spotted Woodpecker. The marshy area held several Heron, Snipe and 2 Green Sandpiper, and along the stream a Kingfisher. In the Woods 5 species of Tit with Treecreeper and Goldcrest were recorded. A visit to Tattershall lakes on a very cold day late in November was run as a count for the BTO Winter Atlas. A variety of passerines were seen as well as a number of feral Greylag Geese, Tufted Duck, Pochard, 2 Goldeneye and a female Goosander.

The February meeting was held on the banks of the Idle where small flocks of brambling were seen, but wildfowl were absent. The March meeting round Knipton Reservoir and Woolsthorpe lakes on the Belvoir estate produced 48 species. 15 Great Crested Grebe were counted on the lakes, Siskin were in the alders and Nuthatch in the woods. In early April Tony Cook led a most interesting meeting at Peakirk and Borough Fen Decoy. The later April meeting to Tetney Haven coincided with the worst weather of that winter when Norah and Margaret Goom were the only members at the rendezvous.

In May a section of the Roman road from near Great Sturton towards

Belchford was surveyed, and later in the month Walesby Lane near Market Rasen. On these occasions we recorded 33 and 36 species respectively of hedgerow and field birds. The Lesser Whitethroat, a bird often overlooked, was closely observed in Blackthorn thickets on both routes. The June meetings were further south. Along the Grantham Canal and Denton Reservoir 50 species were recorded, and there was breeding evidence of Great Crested Grebe, Tufted Duck, Moorhen, Coot, Pied Wagtail and 5 species of warbler. The Viking Way eastwards of Marston previously surveyed in 1978, was re-visited. Also surveyed in June was Old Hagg Wood on the Doddington Estate where the heronery this year had 15 nests all in oaks. The Nightjar meeting on 1st July in Laughton Forest turned out to be cold and dark, and only 2 birds were churring. Later in July Peter White led a meeting in Hartsholme Country Park.

Two meetings were held on the Humber between South Ferriby Cliff and Barton on Humber. On the latter, in October, Bearded Tit showed themselves well at the reed beds. In September on the coastal visit to Friskney at high tide 11 Garganey and 12 Sandwich Tern were recorded as well as good numbers of waders including a large flock of Dunlin and Ringed Plover feeding on smelly rotting potatoes dumped just above high tide level.

Notable among members' records received were 19 Bewick Swan on Lea marshes on 25th January, flocks of 50 to 60 Brambling in Riseholme Park during January, a Dipper at Hubbard Hills and at Riseholme in January, and 2 Rough-legged Buzzards at Nettleton Beck also in January. On 18th March Chiffchaff was heard at Birthorpe. Three reports of Quail were received including evidence of breeding in the Grantham vicinity. In autumn an Alpine Swift was recorded at Donna Nook on 13th September, Long-tailed Duck at Gibraltar Point on 18th October, and Fieldfares on the move in large numbers 23rd to 25th October.

PLANT NOTES

I. Weston

1981 has been a red letter year for Lincolnshire botany. (It should perhaps be reiterated here that the LNU records are in the historic county of Lincolnshire and not within the new boundary line). Epipactis dunensis, dune helleborine was recorded in Crowle Waste. It is a Red Data Book plant and one which has a fascinating distribution in Britain, whose ecological requirement is virtually unknown and which is critically diagnosed away from E.leptochila as one of our rarest orchids. The diagnosis is difficult and although the "jizz" of the plant was obviously different from E.helleborine and it looked like the "Anglesey" E.dunensis and ran down to it, confirmation was necessary from the referees, Dr. Knight of Exeter and Dr. J. Richards of Newcastle. Both confirmed. Obviously the species has now to be monitored in its new British locality and the Lincolnshire Trust is well equipped to ensure its protection at Crowle. Incidentally this species is featured on the back cover of David Langs recent book "Orchids in Britain" (Oxford University Press 1980). The Lincs. Trust Reserve at Crowle where bog rosemary, cranberry and the large yellow rattle are recorded is an area unusually rich in the rarer plant species.

The Epipactis purpurata from S. Lincs (Trans XX 2.1981) has done well

in 1981 and is being very carefully monitored by Mr. M. Pool who has sent detailed information to the NCC & the Trust, hoping that some form of agreement with the Forestry Commission can be made to ensure protection for the colony. Since the publication of the last Plant Notes however, research into the herbarium at Lincoln has shown that the 1895 record from Dunsby Wood by Mason and Peacock (see Lincolnshire Flora p.257) was in fact confirmed only by D.P. Young in 1953. This record, though a very old one, is now recorded as the Northern limit for the species. I quote from the letter enclosed by Dr. Peacock. "This wood is on Boulder Clay, where Epipactis latifolia (now called E.helliborine) is common enough. One corner of the wood is on cornbrash. Having the drift map we made for it, to note the change in the flora for my book. We came across this specimen, the whole plant a livid purple except the upper leaves". There-fore E.purpurata was present in Dunsby in 1895!

The genus Epipactis has recently been revised in "Guide to the identification of some difficult plant groups" by M.J. Wigginton and G.G. Graham, available from Interpretative Branch, NCC, Attingham Park, Shrewsbury.

The reappearance of Pililania globulifera in the County List is exciting, as this unusual fern is indicated in the Red Data Book as being threatened in Europe as a whole and therefore our British populations are of some significance. Mrs. V. Wilkin, warden of the Messingham Sand Pit reserve, found the extensive colony - some very lush above the water level and fruiting prolifically and some under water as is more common in the Radnorshire localities.

Petroselinum segetum, corn parsley is also under threat in Europe as a whole and is included in the IUCN List (Red Data Book p.29). It was interesting to see a large quantity of this arable weed in a sugar beet field at the Caythorpe Centre of the Lincolnshire Agricultural College in 1981. Significantly the nature of the crop had allowed the weed to come to maturity and some of our rarer cornfield weeds have also recently been observed in dicotyledonous crops.

It would be interesting to record these 'refuge' crops in the future. The notable decrease of arable weeds due to spraying by herbicides since the last war has resulted in a request for data relating to the declining species. Corn Cockle, Cornflower and Corn buttercup and the two Fluellens are amongst the list, and records would be appreciated. At the 1981 BSBI. London November meeting Petroselinum Segetum was indicated as being found chiefly in the SE of Britain.

Much interest was evoked when Dr. George Peterken of the Chief Scientist Team of the Nature Conservancy Council came to Lincoln to give the January 1982 Lecture to the Union. Dr. Peterken has worked in a study area in Central Lincs over many years and is especially interested in the ancient small-leaved lime woodlands around Wragby and Bardney and in the colonisation of species into the secondary woodlands. Small leaved lime is a truly native tree, unlike the common lime which is planted extensively in parklands. John Ray recorded it as long ago as 1670 near Wragby when it was much more widespread. It is a feature of the lovely ancient woods of central Lincolnshire, many of which were owned and managed by the monks before the dissolution of the monasteries. Dr. Peterken's recent publication "Woodland Conservation and Management" (Chapman and Hall, 1981) though costly, is recommended to LNU members

as it contains a great deal of the history and management of woodlands not only in his Lincolnshire study area, but overall. It deals with the objectives and priorities of nature conservation in British woodlands and is a book with an individual and enthusiastic approach which LNU members will associate with his lecture. It combines much which has been written in various articles and papers both by Dr. Peterken and others over recent years and puts into perspective the distribution of our native tree species through the post glacial periods to the present day. The distinctions between primary and secondary, ancient and recent woodland are clarified, and fascinating historical data not easily obtainable from other sources is extensive. The amount of research work obviously done for this book is only partially indicated in the bibliography which does not adequately show the extent of his searches into estate papers and archives, apparent and much appreciated in the Lincolnshire lecture. It is an authoritative, comprehensible and readable contribution to the literature and one which should stimulate an appreciable increase in the interest of our ancient woodland heritage and introduce many to the new discipline of "historical ecology". Dr. Peterken acknowledges the impact of the Forestry Commission plantations on the British landscape which are expansive whilst the ancient woodland areas are decreasing, and discusses timber production here as opposed to deciduous woodland where natural perpetration of native flora is a side issue of the economy. Also where conservation has become a skill separated from profitability. The motives, objectives and priorities are different and these he discusses with a view as to how woods could be managed to combine their conservation value with a satisfaction of material needs. Mainly he contributes a common sense approach to the integration of economics and conservation of woodlands in Britain today. The comparison with European Woodlands enlarges the understanding of the wood in Britain.

The new Forest Nature Reserve in Central Lincolnshire formed by an agreement with the FC & NCC which was the subject of a radio broadcast by Dr. Peterken in 1981, recorded in Great West Wood, will show some of the traditional management of the past and also combine forestry practise and economics with retention of type flora. One hopes that future Government policy will cater for an increase in both FC and NCC recruitment and budgeting so that more agreements of this type may be reached.

ENTOMOLOGICAL NOTES

In view of the scarcity in recent years of invertebrate entomological records for other than Lepidoptera and Diptera we feel that the following records received from Mr W.A. Ely, Keeper of Natural History, Clifton Park Museum, Rotherham should be published. (Editor)

GIBRALTAR POINT N.R. - VC54 - 19th SEPTEMBER, 1976

Woodlice	<i>Oniscus asellus</i>
	<i>Philoscia muscorum</i>
Harvestmen	<i>Oligolophus agrestis</i>
	<i>Phalangium opilio</i>
Spiders	<i>Meta segmentata</i>
	<i>Araneus diadematus</i>
	<i>A. quadratus</i>
	<i>Erigone longipalpis</i>
	<i>Zygiella atrica</i>
Earwig	<i>Forficula auricularia</i>
Grasshoppers	<i>Chorthippus brunneus</i>
	<i>C. albomarginatus</i>
	<i>Myrmeleotettix maculatus</i>
Bush Cricket	<i>Conocephalus dorsalis</i>
Froghoppers	<i>Philaenus spumarius</i>
	<i>Neophilaenus lineatus</i>
	<i>Aphrodes bicinctus</i>
Groundbug	<i>Scolopostethus thomasi</i>
Flowerbug	<i>Anthocoris nemoralis</i>
Damselbugs	<i>Stalia major</i>
	<i>S. boops</i>
Leaf bug	<i>Piesma quadratum</i>
Grassbug	<i>Notostira elongata</i>
Shorebugs	<i>Saldula pilosella</i>
	<i>S. palustris</i>
Groundbeetles	<i>Calathus mollis</i>
	<i>C. fuscipes</i>
	<i>C. erratus</i>
	<i>Dicheirottrichus gustavi</i>
	<i>Pogonus chalceus</i>
	<i>Bembidion unicolor</i>
	<i>B. varium</i>
	<i>B. assimile</i>
	<i>Demetrias monostigma</i>
Ladybirds	<i>Coccinella 7-punctata</i>
	<i>C. 11-punctata</i>
	<i>Tytthaspis 16-punctata</i>
Weevil	<i>Cleonus piger</i>
Rove Beetle	<i>Staphylinus ater</i>
Fox moth larva	<i>Macrothylacia rubi</i>
Cranefly	<i>Tipula paludosa</i>
Greenbottle	<i>Orthelia caesarion</i>
Red Ants	<i>Myrmica rubra</i>
	<i>M. ruginodis</i>
	<i>M. scabrinodis</i>
German Wasp	<i>Vespa germanica</i>

GIBRALTAR POINT N.R. -12.4.1977 (additions to 19.9.1976)

Woodlice	<i>Armadillidium vulgare</i>
	<i>Porcellio scaber</i>
Millipedes	<i>Tachypoloiulus niger</i>
	<i>Cylindroiulus punctatus</i>
Ground Beetles	<i>Dromius melanocephalus</i>
	<i>Harpalus (Harpalus) tardus</i>
	<i>Metabletus truncatellus</i>

Rove Beetles	<i>Xantholinus linearis</i>
	<i>Aloconota (Aloconota) gregaria</i>
Dung Beetle	<i>Aegialia arenaria</i>
Weevil	<i>Otiorrhynchus ovatus</i>

WILLINGHAM FOREST N.R. (53/18) - VC54 - 31st MAY, 1975

Froghopper	<i>Cercopsis vulnerata</i>
Common Flower Bug	<i>Anthocoris nemorum</i>
Capsid Bug	<i>Harpocera thoracica</i>
Water Cricket	<i>Velia (Plesiovelia) caprai</i>
Pond Skater	<i>Gerris lacustris</i>
Water Boatman	<i>Sigara (Vermicorixa) lateralis</i>
Lacewing	<i>Chrysopa perla</i>
Ground Beetles	<i>Nebria brevicollis</i>
	<i>Pterostichus madidus</i>
	<i>P. melanarius</i>
	<i>P. niger</i>
	<i>Calathus piceus</i>
Water Beetle	<i>Oreodytes halensis</i>
Ladybirds	<i>Adalia bipunctata</i>
	<i>Propylea 14 - punctata</i>
Soldier Beetle	<i>Cantharis decipiens</i>
Leaf Beetle	<i>Haltica palustris</i>
Rove Beetle	<i>Othius punctulatus</i>
Cranefly	<i>Tipula (Acutipula) luna</i>
Feverfly	<i>Bibio leucopterus</i>
Assasinfly	<i>Dioctria rufipes</i>
Empid	<i>Empis (Xanthempis) stercorea</i>
Hoverflies	<i>Leucozona (Leucozona) lucorum</i>
	<i>Platycheirus (Platycheirus) manicatus</i>
	<i>P. (P.) albimanus</i>
	<i>Sphegina clunipes</i>
	<i>Syrphus torvus</i>
	<i>S. ribesii</i>
	<i>Melangyna cincta</i>
	<i>Parasyrphus vittiger</i>
	<i>Cheilosia albitarsis</i>
Acalypterates	<i>Psila (Psila) merdaria</i>
	<i>Tetanocera ferruginea</i>
Greenbottle	<i>Dasyphora cyanella</i>
Muscids	<i>Fannia hamata</i>
	<i>Helina duplicata</i>
Yellow Dung Fly	<i>Scathophaga stercoraria</i>
Black Ant	<i>Formica fusca</i>
Solitary Wasp	<i>Argogorytes mystaceus</i>
Bumble Bees	<i>Bombus (Thoracobombus) pascuorum</i>
	<i>B. (Bombus) lucorum</i>
	<i>B. (Pyrobombus) pratorum</i>
	<i>B. (Megabombus) hortorum</i>

AN EARLY RECORD OF THE LARGE COPPER (*LYCAENA DISPAR* HAW.)
IN LINCOLNSHIRE

E. J. Redshaw

The British race of the Large Copper butterfly (*lycaena dispar* Haw.) was first described from the Huntingdonshire fens by Lewin in 1795. Its principal localities were Whittlesey Mere (Cambs), Yaxley, Holme and Woodwalton Fens (Hunts), with possibly smaller colonies at Bardolf Fen (Norfolk) and Benacre (Suffolk). The last occurrence of this species in the wild, according to South (1945), was in 1847 or 1848, when five specimens were taken at Holme Fen. However, there is a later record, of specimens being taken at Bottisham Fen (Cambs) in 1851 noted in Duffey (1968), and in Transactions of the Lincolnshire Naturalists' Union for 1910 there is reference to Large Coppers being taken at Morton Carrs (near Gainsborough) about 1860. Bretherton, writing in the "Entomologists' Gazette" in 1951, saw no reason to doubt this latter record.

In the Fifth Minute Book of Spalding Gentlemen's Society (Founded 1710), under the entries for 28th September, 1749 appears the following report:

"The Orange Argus of Elloe, an Elegant Butterfly depicted & discover'd by the Secr'y. The Secretary Shew'd the Company a Butterfly which he took on the Dozen's Bank of which he sent a limming to Mr. Da Costa to whom and to the Aurelian Society 'tis entirely unknown. Therefore the President Desired it might be Scetch'd into the Book and at his Instance the Secr was so obligeing to make these very exact pictures thereof above".

Mr. Da Costa was Emanuel Mendes Da Costa, a notable naturalist of the period, Foreign Secretary to the Royal Society, and a Member of the Spalding Gentlemen's Society. The "limming" is a coloured painting showing the upper and under surfaces of a large orange butterfly, to which is appended the scientific name "Argus Aurantius Elloensis". Although the wings are shown set unnaturally with the front edge at right angles to the thorax, the quality of the painting, in detail and in colour, leaves no doubt that the specimen was a male Large Copper.

Dozen's Bank, where the specimen was taken, presumably in the preceding July or August when this species is on the wing, is situated in the parish of Pinchbeck, on the western edge of 10 km square TF/22, and in 1749 formed the eastern boundary of the old Counter Drain Washes. This section of the washes was drained about 1775 when the old Counter Drain was realigned to join the Vernatt's Drain in Pode Hole.

Although these washes would have been flooded in winter, it is likely that similar conditions were present in the Cambridgeshire fens prior to drainage. Purefoy, in Duffey (1968), records that winter flooding was not responsible for excessive mortality of the larvae, although late spring floods would be disastrous. Parts of the Pinchbeck South Fen section of the Counter Drain Washes probably remained unflooded throughout most winters, as aerial photographs indicate the presence of a four-armed duck decoy in these washes not far from the eastern end.

As the known 19th century colonies of this species appeared to be confined to comparatively small areas, it seems possible that the Pinchbeck specimen was taken within the range of a local colony. More important is the fact that this note and painting in a 1749 Minute Book pre-dates other records of the Large Copper butterfly in Britain by some 46 years.

Acknowledgements

I am grateful to the President and Members of Council of the Spalding Gentlemen's Society for permitting me to publish the details contained in the Society's Minute Book relating to the large Copper butterfly, and for allowing me to take colour photographs of the relevant page, and to Mr. J.H. Duddington for bringing the Morton Carrs record to my attention, including details of dates.

References

- Bretherton, R.F. (1951), in Entomologists' Gazette; 2, 211-240.
 Baines, F. (1909), in Trans. Lincs. Nat. Union; 2. 152.
 Duffey, E. (1969). Ecological Studies on the Large Copper Butterfly (Lycaena dispar Haw. Batavus Obth. at Woodwalton Fen. J. appl. Ecol., 5, 69-96.
 Frohawk, F.W. (1934). The Complete Book of British Butterflies. London.
 South, R. (1945). The Butterflies of the British Isles. London.
 Johnson, M. (1749), in Spalding Gentlemen's Society Minute Book; 5, 49.

NOTE See the cover illustration of the relevant page of the Minute Book of the Spalding Gentlemen's Society

REVISED CONSTITUTION

Following the approval of several revisions at the Annual General Meeting the current Constitution of the Union is given below for ease of reference.

CONSTITUTION OF THE LINCOLNSHIRE

NATURALISTS' UNION

Adopted 13 March, 1982

Aims and Objects

1. The Lincolnshire Naturalists' Union exists to promote the thorough investigation of the geology, fauna, flora and physical features of the County, to bring together workers following the same pursuits, and to increase the interest in, and study of every branch of natural history.

President

2. There shall be a President of the Union who will take office the year after being elected President-elect. The consent of a nominee must be obtained before the nomination as President-elect can be accepted for the Annual General Meeting. The President must be connected with Lincolnshire either by birth, residence or scientific work.

Officers

3. The Officers of the Union shall consist of the President, Hon General Secretary, Hon Treasurer/Membership Secretary, Hon Programme Secretary, Hon Editor Transactions and Hon Publicity Secretary, and shall be elected annually.

Executive Committee

4. The Executive Committee of the Union, which shall be elected annually, shall consist of the Officers of the Union with the President-elect and the immediate past-President, together with four other members who shall not serve for more than four years consecutively but who shall be eligible for re-election after a break of one year.
5. The Executive Committee shall have the sole management of all affairs of the Union, subject to the approval of the Annual General Meeting. This shall include the filling of temporary vacancies of officers (but not including the President-elect), and the power to co-opt in special circumstances (but such co-opted members shall not have a vote on the committee). The Executive Committee shall have authority to form Sub-Committees to exercise particular functions. The Committee shall meet as and when there is business to transact. At its first meeting after the Annual General Meeting the Committee shall elect its own Chairman for the year.

Sections and Groups

6. There shall be subject Sections or groups of Sections, each with a President and one or more Secretaries. The number and arrangement of Sections may be varied from time to time to suit the development of the various branches of natural history. The Officers of the Sections shall be elected annually at the Annual General meeting.

7. A Section may elect its own Committee from among members with appropriate specialist interest to organise that interest. The President, Hon General Secretary and Hon Treasurer/Membership Secretary of the Union shall be ex-officio members of any such Section Committee, which shall be responsible to the Executive Committee of the Union.
8. There may be a Junior Section responsible for organising special activities for Junior Members of the Union.

Representatives

9. The Union shall be represented on such bodies as the Annual General Meeting or the Executive Committee shall from time to time determine.

Nominations and Elections

- 10.a) Nominations for Officers of the Union, for four members of the Executive Committee for the Hon Auditor and for representatives of the Union on other bodies shall be made in writing incorporating the consent of the nominee to the Hon General Secretary at least seven days before the date of the Annual General Meeting of the Union.
- b) Election shall be by a simple majority.
- c) Eligibility to vote at the Annual General Meeting shall be one vote each for Hon Life, Life, Ordinary and Student Members, one vote each for Family Members to a limit of 2 adults per family, and for Group Members one vote for the entire Group.

Membership and Finance

- 11.a) There shall be six classes of membership:
Life, Ordinary, Student (over 18 years and in full-time study), Junior (up to 18 years), Family and Group (Societies, Schools, Colleges, Museums, Libraries, etc.)
- b) It shall also be possible for an Annual General Meeting to elect Honorary Life Members of the Union.
- 12.a) Subscriptions shall be due on joining and then on 1st January each year. The amount of the subscription may be varied from time to time by consent of the Annual General Meeting or a Special General Meeting held in pursuance of Paragraph 19.
- b) Where a membership commences between 1st October and 31st December inclusive, payment of the first subscription shall bring the full benefits of membership from the date of joining to the end of the financial year following.
- c) The financial year shall be from 1st January to 31st December, the accounts to be presented at the Annual General Meeting following.
13. There shall be an Honorary Auditor who shall be elected annually.
14. The income and property of the Union, whence so ever derived, shall be applied solely towards the promotion of the aims and objects of the Union as set forth above, and no portion thereof shall be paid or transferred directly or indirectly by way of dividend, bonus or otherwise howsoever by way of profit to individuals or any associate of the Union.

Publications

- 15.a) The Union shall publish annually the Transactions containing papers and reports, which shall be available free to Life, Ordinary, Family and Group members. Junior and Student members shall be entitled to receive Transactions on payment of the difference between their subscription and that of an Ordinary member or on payment of the current sale price of Transactions, whichever is the lower.
- b) The Union may also from time to time publish Natural History Brochures.
- c) The Union may publish an occasional Newsletter.

Meetings

16. An Annual General Meeting shall be held in March, followed by the address of the retiring President, and an Annual Exhibition and Meeting shall be held to receive Section Officers' reports, at least fourteen days' notice to be given of such meetings.
17. Six or more Field Meetings shall be organised each year.
18. The Union shall also arrange lectures and demonstrations during the winter months.
19. A Special General Meeting may be called by the Executive Committee, or on the written request of at least ten members of the Union. Such Special General Meeting must be held within forty-two days of the decision of the Executive Committee or of the written request being received by the Hon General Secretary, at least fourteen days' notice to be given of such meeting.

Headquarters

20. The Headquarters of the Union shall be the City and County Museum, Lincoln, where it shall maintain its library, records and reference material.

Amendments

21. Alterations, additions or amendments to this Constitution may only be made by an Annual General or Special General Meeting by a two-thirds majority of members present and voting. Thirty members shall form a quorum. Notification of proposed alterations, additions or amendments must be made in writing to the Hon General Secretary of the Union at least fourteen days before the date of the Annual or Special General Meeting.

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ORDERS should be sent to:

Mrs E V Pennell,
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LINCOLN, LN4 2LH

Note: Members of the Lincolnshire Naturalists' Union may purchase all items except Transactions and Pamphlets at a discount of 10%.

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