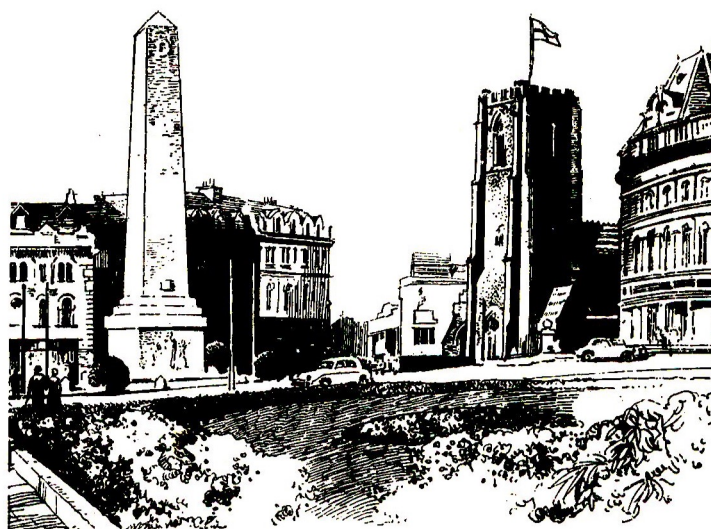


THE HISTORY OF THE HARROGATE & DISTRICT NATURALISTS' SOCIETY

A Silver
Jubilee
Booklet
1947~72



FOREWORD

This History, compiled and written by Mrs. E.M.S. Newfield with contributions from other members of the Harrogate and District Naturalists' Society commemorates the first twenty-five years of the Society's existence. The Editorial Committee would like to take this opportunity of thanking Mrs. Newfield on behalf of the Society for the very considerable amount of time and energy that she has devoted to this task. Unfortunately, Mrs. Newfield was prevented by illness from participating in the final stages of its preparation, but had she not been the prime mover in all the necessary research and writing involved, it is most unlikely that the History would have been produced.

Editorial Committee:

Miss H. M. Jackson
W. H. Jowsey (Chairman)
J. R. Mather
Miss M. R. Sanderson
A.F.G. Walker (co-opted)

CONTENTS

Foreword	Inside Front cover
Introduction	1.
The First Society	2 - 4
The Present Society	4 - 13
Botany	13 - 16
Entomology	16 - 17
Ornithology	17 - 21
Vertebrate Zoology	21 - 24
The Weather	24 - 26
Appendices	27 - 28
Acknowledgements	29.
Map	Inside Back cover

INTRODUCTION

In evolutionary terms the span of the twenty-five years covered herein is but a moment's pause; in human terms, however, it is at least a third of a lifetime. The following pages recount not only the activities of a corporate society but also those of individual members.

The amateur naturalist seems to be a typically British animal. Perhaps this stems from the last century and the early part of this one when many fine amateur naturalists were contributing greatly to our knowledge of the fauna and flora, largely without the aid of modern technology. In our own county, the names of Thomas Nelson, Riley Fortune, Ralph Chislett and Chris Cheetham come readily to mind. The birth and growth of societies of amateur naturalists was greatly accelerated after the second world war but we in Harrogate were particularly fortunate to be reared under the protective guidance of the Yorkshire Naturalists' Union, a mature organisation first formed in 1861. The Society's activities were also considerably influenced by such national organisations as the British Trust for Ornithology, The Wildfowl Trust and the Botanical Society of the British Isles. Nationally conceived projects needed competent local amateur naturalists on the ground to collect the vital data on which were based many conservation measures subsequently taken. The concept of co-operative field work is now well-known and eagerly accepted by an ever-increasing number of naturalists anxious to provide national bodies with quantitative evidence and information on the distribution of species as more and more of this small island is developed.

I hope readers can go back with me in their imagination and consider for a moment, say in 1948, the idea of mapping on 10 km squares the distribution of all plants and breeding birds in the Society's area. The thought would have been preposterous - and yet by 1972 it had been done - the work undertaken competently and enthusiastically.

As the Society stands today it is encouraging to know that within the membership there is a wealth of knowledge about the wildlife of this part of Yorkshire. The Society's reports record for posterity the status of most forms of wildlife against which can be measured the changes brought about by the years to come.

Like a century first wicket opening stand, the foundation has been solidly laid; may those who follow ensure that the innings continues to flourish.

Alan Walker.
President

THE FIRST SOCIETY

It will come as a surprise to many members of the Society to learn that, if early plans for it had succeeded, this 25th Anniversary would have been celebrated as long ago as 1911 and we would have been looking forward to our centenary in 1986.

We are indebted to G.A. Shaw, this year's President of the Yorkshire Naturalists' Union, for the earliest information about this original Society. In a copy of The Naturalist, the monthly (now quarterly) journal of the Y.N.U., for the year 1886, Mr. Shaw has tracked down a reference to the inaugural meeting of the Harrogate & District Naturalist & Scientific Society, held on the 25th of February, at which the officers were elected and rules drawn up.

The President was William Storey, a West Riding County Council Surveyor, of Pateley Bridge, the Vice-President, Riley Fortune of Harrogate, with a Secretary-Treasurer and a Committee of three. There was a membership of nearly seventy. No list of these remains, but through Mr. Shaw's researches on our behalf, the following are known to have been members:-

-. Armstrong, R. Barber, F.R. Fitzgerald, J.Lund, J.Naughton
and W.H. Turner.

It is possible that some readers may recognise a name on this list, and if any information is known it would be very useful for the Society's archives. This information, unearthed by Mr. Shaw, comes from a book: Yorkshire's Contribution to Science, published in 1916. The author was Thomas Sheppard, F.G.S., F.S.A. (Scot.) Curator of the Hull Museums, a noted member of the Y.N.U. (who became President in 1914), for many years the Editor of The Naturalist and a man noted for his pungent wit. His book supplies the added information that the members were keen, mainly interested in ornithology, and, during their first year, had mounted a successful Natural History Exhibition. In spite of this, the Society did not survive, and after publishing its first, and last, Annual Report of 1886-7, it was disbanded. Why this is so remains a mystery, but the following quotation from Sheppard's book may be significant:-

'Among the rules, No. 6 states that "the Council have the power to expel any member" and an amusing record appears in pencil on the last page, viz., "That this meeting is of the opinion that the Secretary of the Harrogate & District Naturalist & Scientific Society, by ignoring the commands of the Committee, is unworthy to fill that important post and that they proceed at once to elect a new Secretary" '.

Internal friction would seem to have been one reason, at least, for the disbanding of our early Society, and no effort seems to have been made to re-form it. This is surprising considering the enthusiasm within other Naturalist and Scientific

Societies in the county at the time. For example, as early as 1831, the Society at York had been influential in helping to promote the famous British Association for the Advancement of Science, which in turn was to influence the standards of all investigations, amateur and professional; while the Society at Thirsk, founded in 1853, achieved national importance among botanists, whose headquarters it became for some years after the closing down of the London Botanical Society.

These were stirring times for the discussion of natural history and scientific philosophy. Although two attempts, about the middle of the century, to found a Mechanics and Literary Institute in Harrogate had failed, the Literary Society, founded in 1875, survived; and it is conceivable that its popularity may have contributed to the short life of our early Society. To maintain two 'learned' societies was asking rather much of the town's 9,000 or so inhabitants, most of whom were engaged in one way or another in satisfying the demands imposed on them by the wealthy visitors taking the waters in Victorian days.

But, though the Society, as such, passed into oblivion, there are records to show that some members, at least, remained active. For example, John Farrah, of Harrogate's famous toffee family, is known to have been a reliable botanist. Evidence of this comes from no less an authority than the Leeds-born medical practitioner, Dr. Arnold Lees, whose Flora of West Yorkshire, published in 1888, is still an invaluable reference work for local botanists. To this book Farrah contributed some of the Nidderdale records, and it is interesting to note that he was an early President of the Society. Amongst other named members, William Storey and F.R. Fitzgerald recorded the fauna, especially the molluscs, of Upper Nidderdale, Fitzgerald also contributing to the Journal of Conchology for 1889.

Of the Vice-President, Riley Fortune, much more is known, and he deserves special mention in this booklet as being one of the most tireless, enthusiastic and forward-looking naturalists that Harrogate has produced. Local records list his family among the numerous guest-house keepers, a fact which may explain his developing interest in natural history in general, via trout fishing and the establishment of hatcheries up the Nidd. All his life he was not only an active field-worker, but also contributed articles to local newspapers and naturalists' journals, for which he supplied his own excellent photographs - no easy undertaking with the camera of his day! For many years he was an active member of the Y.N.U. being Hon. Secretary of the Vertebrate Section, and finally President of the Union in 1915.

As a Society, our debt to him lies in his contribution: 'The Vertebrate Fauna of the Nidd Valley', in H. Speight's Nidderdale, published in 1894, in which he lists mammals, birds, reptiles and fishes and their locations, together with many interesting personal notes. He was obviously a keen protectionist - a rarity in those days when, as he deplores, small singing birds were netted by the score for marketing; when owls, kestrels and other predators were ruthlessly persecuted by

game-keepers; and when hundreds of toads, captured on their move for spawning, were destroyed by reservoir keepers. He also noted and deplored the decrease in bats owing to the 'greed of collectors and self-styled naturalists'. Red Squirrels and Hedgehogs he reported as common, also Vipers, Lizards and Slow-worms; while Foxes, Weasels and Stoats he reported as abundant. The Badger, he noted, was probably extinct. His personal observations are of great interest, as for instance when he saw, during severe weather in February 1886, several grouse foraging for food in the streets of Harrogate, and in a bad summer the same year, Swallows and Martins dying by the hundred for lack of insects. And his forecast that the planned building of Gouthwaite (completed 1901) would see an influx and increase of water birds was a unique point of view for the period. His general ornithological notes are probably less accurate, as records of many species reported to him by other contributors remained unconfirmed. But of his reliability as an observer, within the limits of the knowledge of his day, there can be no question. It is more than likely that his lists in Speight provide us with our early Society's first and only fauna records.

THE PRESENT SOCIETY

It was to be another sixty years before the Society was re-formed and during the intervening period, the country both enjoyed, and suffered from immense changes of every kind including, in particular, the invention of many machines which could so quickly alter the long-standing patterns of rural life.

Mechanisation, and its often destructive effects, roused the first stirrings of conscience that led to the setting up of protected areas and as early as 1919 the Society for the Promotion of Nature Reserves created its first reserve at Woodwalton Fen. In 1926, the first of the County Naturalists Trusts was formed in Norfolk. Yorkshire followed in 1946, with its first reserve occupying part of Askham Bog; in the same year Spurn Bird Observatory was established, and The Royal Society for the Protection of Birds acquired Minsmere in 1947.

More general interest in the countryside was reflected in the setting up of the National Parks Committee in 1945 and by the increase in the popularity of rambling clubs, particularly after World War II. This period too, saw the inauguration of many new Naturalists' Societies within the county. Among the first was Wharfedale in 1946, with Harrogate a year later.

It is noteworthy that some of our founder members, Miss E. Unné, Miss D.R. Walker and Miss O. Windemer were also members of the local rambling club; and the following year, C.C. Gaunt, who did so much to preserve local footpaths, joined our Society. Miss Unné deserves mention as having remained a member of both organisations.

Our inaugural meeting, held at the Old Church House in Cambridge Road, was reported in the local press. The name was the same then as in 1886, "The Harrogate and District Naturalist and Scientific Society", and it was formed with the same object "of studying natural history in this area in its many branches". Its first President was A.E. Winter, F.R.E.S., of Scotton, whose death occurred in 1972, at Scarborough, to which he moved in 1961. D.M. Jesper, also an entomologist, was elected its first Treasurer and Secretary; in fact, the Society owes its rebirth to conversations between these two friends. A local press report states that 19 founder members attended the first meeting but 11 others had promised their support. No date for this meeting was given in the press report, but the earliest subscriptions were paid in December 1947, from which date we may regard our Society as having been formally re-established. Of these founder members, several happily are still among us and it is with great pleasure that we give their names: W. Beck, Miss G. Bramley, D.M. Jesper, Miss C. Shaddick, Miss E. Unné, A.F.G. Walker, Miss D.R. Walker, G.R. Wilkinson (died 12th May 1973), Miss O. Windemer, and Miss M. Wray.

A.E. Winter gave the opening lecture of the season, at Belvedere (now The Harrogate School of Art), his subject being "The Biological Control of Insect Pests (with special reference to Greenfly)", and the lecture was illustrated with his own lantern slides. He was well-known as an insect photographer and over the years built up a valuable collection of entomological specimens. Records of subsequent lectures and minutes of Council Meetings for the years 1948, 1949 and 1950 have not been traced to date, but from the early cash-book we learn that an expedition had been made to Malham in 1949 and that during the winter, it had been possible to pay the expenses of a number of lecturers including Dr. W.D. Hincks, a well-known entomologist and President of the Yorkshire Naturalists Union in 1945. In 1949, a library was started; lectures continued to be held at Belvedere in 1950 and in both years, syllabuses were printed. The Society was evidently financially sound.

Because of the absence of any other material covering our indoor activities during the first three years, we have invited D.M. Jesper, as a Founder Member, to add a few notes here on his personal reminiscences.

'Towards the end of the war, Mr. Winter and I used to get off whenever possible on entomological excursions and we always went to the Y.N.U. Entomological Meeting in Leeds. It was on the train on the return from one of these meetings, that the idea of forming a Harrogate Society was really born. After that and following numerous telephone conversations and visits to each other's homes, circular letters were sent out to all known members of the Y.N.U. in the district and to as many other people as we thought might be interested. This would be in November, 1946.

The first lectures were given by members of the new Society and their friends (including Mr. Charlesworth and Mr. Wells) who gave up an evening without

making a charge, in order to get us on our feet. Mr. Winter gave his illustrated talk on the Greenfly, I gave talks on Insect Protection, Feeding Habits, and Wild Bees as well as other talks on beetles, and Dr. Hincks came on two occasions to talk on aspects of Hymenoptera and Coleoptera. Highlights in these early years were the evenings given by George Yeates on Geese in Iceland. When I was President, following Mr. Winter, I remember introducing Ian Appleyard, now Chairman of the Appleyard group of companies, who showed the Society a very fine cine-film of the Dipper. Several members of the Y.N.U. helped with talks, and members' evenings, with two or three taking part, were popular. The Y.N.U.'s decision to hold its Whitsuntide meeting in Harrogate was a highlight in the early years. On this occasion, Picking Gill, Pot Bank, Haverah Park and Scotton Banks were all visited and I well remember at the Pot Bank meeting, Chris Cheetham, who could not walk very much and spent the time pottering about near the bridge, being very pleased to find a snake-fly on his coat. A large colony of Green Hairstreak butterflies was seen amongst bilberries in a marsh about 100 yards from the bridge. I wonder what the status of that colony is today.

In the first years the summer excursions were well attended. Our Hon. Vice-Presidents were Sir Cecil Aykroyd, Bt. of Birstwith, Sir John Barran, Bt. of Sawley Hall and Captain, now Sir Everard Radcliffe, M.C. formerly of Rudding Park, and we were welcomed on their land. We had our own excursions to Picking Gill and Scotton Banks; we also visited Copgrove Hall Estate, Wakingham Warren, Pilmoor, Pateley Bridge and joined the Wharfedale Naturalists with Mr. Marjoram at Riffa. On May 13th, 1950, we saw a large colony of Holly Blue butterflies at Copgrove. There were literally dozens on the wing, but I have never seen them since. Other recorded visits were: Spurn, June 1947, Guys Cliff, July 2nd 1947, Askham Bog, June 27th 1949, Allerthorpe Common, July 23rd 1949, and Cayton Gill, July 1951 and April 1952. We also had an excursion to Buttercrambe Woods near Stamford Bridge. The date escapes me, but I do remember the keeper who showed us his large gibbet and was most reluctant to let us out of his sight all the afternoon.

The value of records has been brought home to me while recording these reminiscences. A note about a single specimen brings back many memories of a particular day that would otherwise escape altogether. Records seem to grow more valuable as years pass. Few would wish to contradict Mr. Jesper's final comment.

Of outdoor activities during the early years, there is substantial evidence, though the first Report, dated 1948, is solely about Ornithology. Even so, the recorders, A.F.G. Walker and the Rev. K. Ilderton of St. Wilfred's Church produced a most interesting list, with acknowledgements to ten other members who had submitted records. The Report refers to the very severe winter of 1946/47 when Long-tailed Tits, Wrens, and Mistle Thrushes, suffered great decrease,

although the first two species were already recovering in 1948. It is interesting to learn that 600-700 Golden Plovers were seen on the Stray in January 1948. The recorders made a plea for more records from more members, but considering that a bare dozen members had been in the field, the list is an excellent beginning to the Society's later extensive ornithological activities.

A similar but even more comprehensive report was produced the following year by the same two Recorders, but this time with the help of several more members, including the entomologists, Messrs. W. Beck, D.M. Jesper and A.E. Winter. G.K. Yeates also contributed; already greatly appreciated as a lecturer, he was later to delight a wider audience with his introductions to the R.S.P.B. Film Shows in the Royal Hall.

The next Report, also ornithological, covered a two-year period and was not published until August 1951. It does, however, record a scheme which was ambitious for a new society - the counting of Wildfowl on local lakes and reservoirs. The task was first undertaken in 1950 and carried out monthly by a team of 29 counters led by A.F.G. Walker, many of whom were members of the neighbouring Wharfedale Naturalists' Society. Among the original counters, active members were: J.R. Mather, Miss C. Shaddick, Miss D.R. Walker, C.W. Webb and Miss M. Wray.

During the first few years, the Society was well organised with a recorder appointed for each major branch of natural history. There was an enthusiastic Council to arrange winter lectures and summer field meetings and to budget for the hire of coaches and lecturers' expenses. The lecturers included many well-known Y.N.U. and Leeds University specialists, and the talks were highly successful. The membership had grown to 71 by the end of 1951, and in every way save one, the Society was flourishing. It was unfortunate, therefore, that the years 1951-53 saw the Society in severe financial difficulties, but this time there was no suggestion of disbanding, although the bank balance on one occasion dropped to 7 shillings.

The acute situation was alleviated by the generosity of members, including Mr. Winter, who, having already given the Society a projector, now presented a binocular microscope for sale; this realised £5. Others made donations or offered the use of equipment. These measures, coupled with strict economy, produced a balance of £29 in 1953, though membership was now down to 57. Lectures and field meetings continued through the year, the lecturers on an exchange basis or for no fee, but even so it was not a very satisfactory year, probably owing to lack of publicity. The following year, membership numbers still continued to cause anxiety. Further difficulties were experienced during 1954, but by October, the financial position, at all events, was declared by Mr. Winter, the retiring President, to be "highly gratifying".

The Society was not in a position, however, to publish an Annual Report until 1955. This was a pity, because during 1953 and 1954, certain events took place which were of particular importance to naturalists. These were the outbreak of the rabbit disease myxomatosis in 1953; in the same year the beginning of a five-year project by the Botanical Society of the British Isles, to list and map every species of plant in the country, all naturalists' societies being invited to participate; and in 1954 a new Act of Parliament for the Protection of Wild Birds.

Though many members of the Society had been making observations and keeping records since its inception, it was not until 1955 that the exact area to be covered by our records was finally decided upon. Miss C. Shaddick, in the General Annual Report for that year, gave details of the area. Its boundaries were expressly defined so that our Society's activities joined, but did not overlap, those of neighbouring societies, of the Wharfedale Naturalists' in particular. A map drawn by C.I. Rutherford, Recorder for Entomology, was to follow in 1963. For printing purposes, this was re-drawn by J.R. Mather in 1967 and has since appeared in all Annual Reports. From the map (see back cover) it can be seen that this is a very large area. It covers in fact, about 900 sq. kms., one sq. km. representing about 250 acres, and as Miss C. Shaddick's notes point out, it could hardly have been a more interesting and varied region, comprising both high and low altitudes, fells and moors, arable and parkland, woods and rough pasture, rivers and marshes, lakes and reservoirs. Equally interesting and important is its geological range, including Millstone Grit, Boulder Clay and other glacial deposits, sandstone and gravel, and two limestones, Carboniferous and Magnesian. The importance of the latter cannot be stressed too much, as exposed Magnesian Limestone occurs nowhere in the country except for this narrow strip about five miles wide, running from Nottingham to Catterick and thence to the mouth of the Tyne, and some of its best sections are to be seen in our Society's area. Over the centuries, it has been quarried extensively and its beautiful building stone may be seen in York Minster and Fountains Abbey. It also produces a good rich soil and much of the narrow strip has been ploughed and farmed for generations. Where the rock remains exposed or only lightly covered, as in many places between Knaresborough and Ripon, there is a marked change in the flora.

1956 saw the capture and ringing at Ripley Park of 4 Canada Geese, the prelude to many large-scale operations, later giving evidence of a moult migration of the species to Invernesshire, the significance of which led to the establishment of the Canada Goose Study Group of Yorkshire in 1969.

During the winter of 1957, while the B.S.B.I. Mapping Scheme was still in progress, a two-day Exhibition was held at the old Church House, Cambridge Road at which the Scheme was described in some detail and specimens of many plants were displayed. Also on view was a fine collection of mosses from F.E. Branson, the Society's bryologist.

The other Sections shared in this, the Society's first public exhibition, with their own representative collections - except for the Mammals Section, for which we apparently had no exhibits. But the gap was most generously filled by John Armitage of the Leeds City Museum with specimens from the collection there.

Entomology was well represented by a fine display of moths and butterflies arranged by D.M. Jesper and A.E. Winter, and Ornithology by many mounted specimens of local species. Of particular interest was a map drawn by J.R. Mather showing the places where birds ringed in our area had later been recovered.

The highlight of the exhibition was a colour film of the Severn Wildfowl Trust, made and shown by Gordon Booth of Ilkley. The show on the second night was attended by over 80 people - a remarkable audience for the old Church House premises.

As the exhibition was open each day from 10 a.m. to 8 p.m. (excluding the Film Show) and a small admission charge was made, there was a good deal of hard work to be shared out amongst members, but the venture was regarded as being most worthwhile since it gave the Society its first real publicity and, incidentally, its first small financial profit.

The following two years, 1958 and 1959, were quiet. In 1959, the ringers in the Society had an exceptionally busy time and published some interesting findings; regrettably, no General Report was produced and little is known of our other activities.

No doubt with a view to increasing its membership, which then stood at 70 (55 adults), the Society published its first brochure in 1960 and the Secretary exhorted members to "go out and recruit". When the Annual Dinner was held the following year, 57 attended. It is an interesting reflection that although the adult membership stood that year at only 67, the Society has never since that date held an Annual Dinner with so many present.

During the Spring of 1962, the Society held another exhibition, this time in the Pump Room Museum (by courtesy of the Harrogate Corporation) to illustrate the nature of our activities, particularly in relation to the Birkham Wood Survey. The exhibition was opened by Dr. J.W.W. Moorman, the Lord Bishop of Ripon, who at about this time, was invited to become a Patron (the term now used to replace "Honorary Vice-President"). The Society welcomed Dr. Moorman since he had, for many years, contributed to the ornithological records. The Exhibition was highly successful, over 11,000 people attending, and a number of new members were enrolled. It lasted from 19th April to 20th May and as a great proportion of the exhibits were living botanical specimens, the task of keeping them fresh involved almost unceasing watchfulness and care by teams of members.

In 1963, the Society moved its meeting-place from the old Church House to the Friends' Meeting House, at that time in Oxford Street. This move was of short duration only, since the Friends were in the process of constructing the new Friends' Hall to be opened in 1966, near the old Belmont School in Queen's Road. Change was in the air. The next move was in 1964 to the new Church House in Victoria Avenue where the Society held its first Spring Annual General Meeting on 24th April. Since the inception of the Society, the A.G.M. had been held in October at the beginning of the winter series of lectures. Now, for financial and other reasons of convenience, the Council felt that an April A.G.M. would be more acceptable.

It was at about this time (1964-1966) that several of the long-standing members retired from office. To relieve the General Secretary of a rapidly increasing volume of work, responsibility for membership was allotted to the Treasurer, and the office of Programme Secretary was created. At the same time, a member of Council was asked to take care of public relations. The period of growth and consolidation which followed in the Society was, on the other hand, a period of rapid change and increasing instability in the countryside. The Society felt the need to take stock: to document in detail as many branches as possible of natural history in the area, so that both then and in future years it would be possible to estimate just what was changing or disappearing, and to what extent. These thoughts must already have been in the minds of two of the Society's members. A "Check list of the Birds of the Harrogate Area" had already been compiled by A.F.G. Walker in 1961. Now there followed a "Check list of the Macrolepidoptera of the Harrogate Area" (1965) by C.I. Rutherford, at that time President of the Society. W.H. Jowsey, a former President, started work on the Plant Recording Scheme which would lead to a comparable knowledge of our flora. The Editorial of the Annual Report for 1966 highlighted the problems which were to beset the country for years to come. Four years before E.C.Y. 70, the Society put forth its plea.

"Wet lands are drained, be it the large marsh or the pond, where as a child you collected frog-spawn or caught sticklebacks, for the pressures are now immense as the population grows. The insatiable demand for land for housing and for food production (with the profit motive?) make it worthwhile with modern plant to cultivate the little wild corners, the tiny wildernesses beloved by birds, flowers and insects. And so, bit by bit, the countryside is "tidied up"; nest-sites, shelter and feeding-places disappear and the wildlife disappears too. Can we not give a little thought, time and money to planting for the future instead of cutting for the moment? "

The most ambitious Exhibition in which the Society took part was in 1967 - the first year of the Harrogate Festival of Arts and Sciences. The theme chosen by the Festival Committee for illustration that year was 'Nature and Man' and our Society was invited to provide appropriate exhibits. Four subjects were chosen by a team led by the President. One, devised by W.H. Jowsey, showed the unhappy results on

plant life as man and his activities multiplied, but it also showed how certain other plants had thrived in abandoned quarries and on disused railway tracks. Another by C.I. Rutherford, showed how certain moths had so adapted themselves to soot and smoke in the atmosphere, that melamistic forms had evolved. The other exhibits demonstrated how the ringing of birds had led to hitherto unknown facts about their dispersal, breeding habits and migration.

All the displays relating to these subjects were in the capable hands of J.R. Mather, who also produced the maps and posters.

With the recording of flowering plants, the larger insects and birds now occupying a major part of the Society's field-work, and with the membership double that of five years before, the President for the year (1967), Dr. A.M.G. Kinnear, decided that the Society had a voice in the affairs of the County and it was in this period that the foundations were firmly laid, and much of the work carried out, for detailed documentation of some of the important sites in the area. The importance attached to this conservation work was reflected in the Council's decision to appoint an S.S.S.I. Officer.

On the retirement of Mr. W. Crowther, the auditor, after many years of service, it was fortunate that the President was able to suggest a willing replacement in Mr. D.E. Walker.

The Society was by now growing fast. Membership was rising, but so were prices, and an increase in the subscription was inevitable. Originally ten shillings, it had been raised to fifteen shillings in 1960 and no further increase had been made since that date. Consent to raise the sum to one pound was given at the A.G.M. of 1968.

Apart from a continuing rise in the membership which in 1968 stood at 273, the years 1968-9 and 1969-70 were mainly uneventful; recording continued quietly but efficiently, the Plant Recording Scheme now being in its third year. It was as well that these two years were not too demanding for the Society since the same could certainly not be said for 1970, the year of K.J. Brock's Presidency. E.C.Y. 70, European Conservation Year, directed the attention of the public to the problems of conservation. Whether through a desire for knowledge or to demonstrate a sense of responsibility, or for other reasons obscure to us all, the public in many quarters gave its support. Almost, it seemed, in recognition of the public's interest, the Society that year produced the Valley Gardens and Pine Woods Nature Trail. Plans for this were first discussed in 1968, with the Corporation's Parks Superintendent, Mr. W. Bishop and in 1969, the routes were mapped and a booklet was written by Miss H.M. Jackson and other members. On 13th June 1970, the Trail was officially opened by the Mayor of Harrogate, Alderman E. Pickard. To date, over 1800 copies of the Trail's booklet have been sold. The wooden direction posts so kindly provided by W.N. Birch, proved to be too great a temptation to vandals, and less

attractive but more durable ones supplied by the Parks and Gardens Department, through the good offices of Mr. A. Ravenscroft, have superseded them.

The end of the year saw the Society with a membership rapidly approaching 350 and the Friends' Hall whose maximum capacity was approximately 90 and which had served us so well since 1966 was, on some occasions, now unable to accommodate the ever-increasing number attending. The variety and interest of the lectures were attracting members. In these years we were fortunate in securing lecturers from many parts of the country and from many well-known natural history and conservation bodies. It was only after a great deal of heart-searching on the Council's part, that a decision was finally reached and with a membership of 361, the Society moved to the Crescent Room. With a capacity of 300, this new room at first seemed uncomfortably large, but gave the opportunity for displays and for using the new portable Notice Board kindly provided by a long-standing member. Material about the Society and its activities was steadily accumulating. Reluctant to consign to the waste-paper basket information which might one day prove to be of real interest, one member suggested the formal collection of such items under the heading of Archives, a task at present carried out by volunteers.

Shortly before the end of the year, Mr. G. Dent of Ribston Hall was invited to become a Patron. He is a former Council Member of the R.S.P.B. and little of interest on his estate escapes the notice of this all-round naturalist. Of very few of our members can it be said that they send annually a page of records to each Recorder.

In October 1971, our Society was invited to take part in an Exhibition of Sport mounted by the Harrogate Sports Council. Several members were in attendance during the three-day event and much interest was aroused in the standing display which had first been used during E.C.Y. 70. On this occasion, it consisted of three panels: one depicted the route of the Nature Trail, one illustrated a selection of the Society's activities and the third displayed membership details and forthcoming events. The photographs were by D.W. Swindells, the material was collated by George Dent and the whole produced by the Harrogate Sign and Display Co. Ltd.

Jubilee Year was now almost upon us. In 1971, however, A.F.G. Walker resigned as Editor of the Annual Report. For many years he had been responsible not only for the publication of ornithological records, but since 1960 had also coordinated the additional material. Proportionate to the increase in membership and the number of surveys undertaken, the number of records increased. In addition, work on Sites of Special Interest, Junior activities, accounts of R.S.P.B. Film Shows all required a place in the Report and it soon became an accepted fact that this information must be recorded. It is a tribute to him that in recent years, he continued to edit a report of increasing complexity, variety and general interest. This service must surely have been in the minds of Council members when they

invited Mr. Walker to stand as President for Silver Jubilee Year.

A commemorative Dinner opened the Year and the Society welcomed as its honoured guests, the President of the Y.N.U., G.A. Shaw, the President of the Y.N.T., C.J. Smith and representatives of the Wharfedale Naturalists with which the Society has been closely connected since its foundation. It was very much a family affair and several founder members were present. Among humorous anecdotes in his after-dinner speech, the President referred to some of the difficulties and set-backs which the Society had fortunately been able to overcome, and spoke with confidence of the future.

Recently an extension of the Society's boundaries has been proposed, thereby adding about 75 kilometre squares to the area, and a clause added to the Aims of the Society at the A.G.M. of 1971 - "that the Society direct its energies to some practical form of nature conservation".

For twenty-five years we have co-operated with and received co-operation from a number of public and private bodies and land-owners (see Appendix 2), and to these we extend our gratitude. A great deal of the Society's field work depends on access - often to private land. Without it our activities would be indeed limited.

To conclude, the functions of a local natural history society, as we see them, are first and foremost to record accurately and to make accessible the findings, and secondly to support local, county or national efforts designed to safeguard the natural diversity of species.

* * * * *

BOTANY

In the Society's first Annual Report (1955), the Botanical Recorder, Miss O. Windemer, gave details of an ambitious mapping scheme which was being carried out by the Botanical Society of the British Isles, and was intended to produce a complete record of the distribution of wild plants in Great Britain and Ireland. Previously there had been local and county floras, but no national scheme had been undertaken. Begun in 1953, the B.S.B.I. scheme was intended to be finished by the end of 1958, and all Naturalists' Societies were invited to participate. The 10 km. squares of the Ordnance Survey grid were to be used as recording units, and for each of these squares a list of plants, as complete as possible, was to be compiled. The collected information was to be published in a volume of maps, one for each species, on which dots indicated the 10 km. squares in which each plant had been recorded. Such maps have largely replaced check lists, wherever the detailed information is available, since they show at a glance the distribution, and, within limits, the abundance of each species.

The area to be covered by our Society comprised seven 10 km. squares and special recording cards were issued by the B.S.B.I. to be used at all Field Meetings. Many members were not sufficiently knowledgeable to identify every species, but it was made clear from the start that even the commonest plants were to be recorded. By 1957, Miss Windemer reported that results had been most encouraging, though, as might be expected, more records came from the low-lying areas than Upper Nidderdale and from the moors. These areas, however, were not being neglected, especially by those members who belonged to the Y.N.U., and joint field meetings with Y.N.U. members of other societies produced excellent results. Nevertheless, the total area to be surveyed was so vast in relation to the number of botanists available - and these only at week-ends or on summer evenings - that a complete survey could hardly be expected within the specified time. A further difficulty, and one beyond all control, was that the mapping scheme happened to coincide with some of Yorkshire's "shorter" and more dismal summers. But in spite of bad weather, enough enthusiasts carried on, and the Atlas of the British Flora* was published in 1962, to be followed, in 1968, by a supplementary and more detailed volume, to which members of the Society also contributed.

Of local contributors to the success of this scheme, special mention must be made of Miss C. Shaddick and Miss D.R. Walker, who were largely responsible for checking our area's records each season and for a vast amount of office work over five years; and of Miss C. Rob, the appointed B.S.B.I. referee and a botanist of national repute, under whose leadership our most successful meetings for the mapping scheme were held, and for whose teaching, both in the field and at lectures, the botanists of our Society owe a great debt of gratitude.

The Society's involvement in a national scheme was to give local botanists an extra stimulus which, in view of their small numbers, might otherwise have been lacking. At the same time it helped to raise standards by familiarising members with modern methods of recording and encouraging them to have doubtful records checked in the field by the Recorder.

Two other recording schemes concerned with the distribution of plants were to follow and are still in progress. The first was to provide far more detailed information for the Society's area. Selective plant lists had of course been compiled since the Society's inception, as is shown by the Annual Reports, and a detailed card index of records was and still is kept up to date by our Recorder, Miss Walker. The new scheme was to follow the B.S.B.I.'s method of recording by maps, this time using the smaller 1 km. squares, of which there were then about 900 in the Society's area, as the recording unit. In 1966, the first year of

*Atlas of the British Flora, edited by F.H. PERRING & S.M. WALTERS, Thomas Nelson & Son, Ltd.

this project, about 70 species were selected for recording, and a similar number has been added to the list each year, while those on previous years' lists continued to be recorded. A summary of the distribution of the plants on each year's list has been given in the Annual Report by W.H. Jowsey, who inaugurated the scheme, collects the records, and prepares the maps. A few species not recorded in the Atlas of the British Flora for our area have been discovered in the course of this survey, and many 10 km. square records could now be added to those shown in the Atlas. About two thirds of the 800 or so species recorded in the Atlas for our area have now been mapped at least fairly adequately. Considering the small number of members who submit records, results are very good, and though such a scheme can never reach completion, the Society should, in a few years, possess a reasonably detailed set of plant distribution maps for the area.

The third scheme, begun in 1971, is also a mapping scheme of the plant distribution for the whole of Yorkshire. This has been undertaken by the Botanical Section of the Y.N.U., and our Society has made itself responsible for its own area, under the direction of one of our members, Mrs. D.E. Haythornthwaite, who is also Secretary of the Flowering Plant Section of the Y.N.U. For this scheme the recording unit is a square of side 2 km, corresponding to 4 unit squares of the Society's survey.

BIRKHAM WOOD SURVEY - 1961-1962

While Miss D.R. Walker was President in 1961, she suggested a most worthwhile project for the Society - one which would involve all Sections and designed to be in the nature of an ecological survey of some local area. The area decided upon was Birkham Wood, Knaresborough, where J.R. Mather reported that recent tree felling might be presumed to have brought about a drastic alteration in plant and animal life. He himself had been studying the birds there for some years and had already recorded 88 species as being present, of which 41 were actually breeding within the wood.

The survey was begun in April 1961, and continued throughout that and the following year when an interim summary was published in the Annual Report. W. Beck noted that mammals were not at all plentiful, being limited to an odd Weasel, Hare, Rabbit, Grey Squirrel and Common Shrew. C.I. Rutherford found comparatively more insect species, reporting 133 in all, although, on the whole, he said, the years of the survey were not good ones for insects. The botanists found themselves involved in so much work that most of their other Field Meetings were abandoned for the two years of the survey and a separate recorder was felt to be necessary to relieve Miss Windemer. Miss Walker undertook this task, and weekend after weekend, almost inch by inch, the whole area of the wood was explored. As it included different sorts of underlying rock, river banks, woodland,

marsh and rough grass, the various types of flora recorded were many and most interesting. F.E. Branson, the Society's expert bryologist, compiled the first list of mosses and liverworts for the area.

Whatever may happen to Birkham Wood in coming years, the Botanical Section's files contain records of its vegetation ten years ago, and as there have already been changes, these records may be as valuable to future botanists as those of Arnold Lees still are to us.

ENTOMOLOGY

The longest section in our first Annual Report, 1955, was that devoted to Entomology, compiled by A.E. Winter and D.M. Jesper. The Society was fortunate in having these two friends as joint Recorders since both were experienced members of the Y.N.U., and A.E. Winter was a F.R.E.S. Between them they also produced, in addition to their general report, a check list of the butterflies and moths observed in our area. Also included was information about ants, ichneumon flies, sawflies, bees, wasps and beetles.

Beetles were not included in the actual Check List for lack of space, as the Recorders had accumulated what A.E. Winter called such 'formidable' records of them. But observations were appealed for on all insect species, in particular on the Great Wood Wasp, which was known to exist from Pateley Bridge down to Knaresborough, as well as in Harrogate itself. The more familiar Common Wasp was reported to have fared badly in 1955 owing to a cold spring, and in some areas did not even appear until late September. The cold spring had affected bees, likewise and D.M. Jesper's reports, as a bee-keeper himself, were particularly interesting. His colonies that year were so weak, owing to lack of nectar from fruit blossom, that even as late as June, they were having to be fed on honey produced the previous season. A change in the weather in July and August, however, brought immediate improvements, and the honey in 1955 finally turned out to be the heaviest crop of the century.

Amusing footnotes to reports on bees, referred to Pygmy Shrews taking shelter in D.M. Jesper's hives on three occasions, and on another a Slow-worm was hibernating underneath one.

Butterflies and moths formed a greater part of the Check List, and as no other was to appear for another eleven years, this first list was all the more useful and informative, particularly as in 1961, A.E. Winter left Harrogate (though he remained an interested member of the Society until his death in 1972). At the same time, D.M. Jesper also resigned as Recorder owing to pressure of other work. Fortunately for the Society, W. Beck, the Vertebrate Recorder, agreed to take over

Entomology as well, for the time being, and as he and Mr. Winter and Mr. Jesper had always cooperated in the past, exchanging observations, the Section's work went on as before. Mr. Jesper, in any case, had not left the Society, and the extra work in which he was involved - evening classes and a regular nature article in the Harrogate Advertiser - was mainly concerned with his chosen subject, so his records continued. Indeed, his and Mr. Beck's contributions were acknowledged as being of great value when the Second Check List was published in 1966, containing ten additional species, and compiled by Mr. Beck's successor, C.I. Rutherford, who had joined the Society in 1961 and was Entomological Recorder from 1962-66. During this period, his own enthusiasm being so infectious, he persuaded a few other members to take more interest than formerly in the subject. Another long-standing member with an all-embracing interest in natural history is C. W. Webb, whose insect photography has won him a prize in a national competition.

The Society was fortunate in having as C.I. Rutherford's successor, Dr. I. J. Faulkner, who has also added to the existing Check List. In his observations, he was much helped by J.R. Mather at Knaresborough Ringing Station. Dr. Faulkner is also interested in fish; lecturing in 1971 on "The Hazards of Being a Fish", he revealed so many of these that listeners might wonder the species survive at all!

Some of our most fascinating lectures have been on insects: wasps, bees, craneflies, aphids as well as spiders (not true insects); all have been given by experts on their subjects, from the late Dr. W.D. Hincks, of Leeds University, in our first season, to W.B. Beilby, County Bee-Keeping Advisor in 1972.

During more recent years, several of the younger members have developed an interest in entomology, particularly moths and butterflies, and the continuance of activity in the section seems assured.

ORNITHOLOGY

Bird-watching has always attracted more members' attention in the Society than any other branch, a bias reflected in most local natural history societies; from the earliest days the Section has been active and often hard-working.

Even before the present Society was formed, T.H. Nelson's "The Birds of Yorkshire" and R. Chislett's "Yorkshire Birds" revealed the contribution made by observers like Riley Fortune of Harrogate to our knowledge of the distribution of birds in the area; these volumes afford a valuable source for students wishing to trace the ebb and flow of populations and species.

But it was not until the birth of the Society in 1947 that the importance of careful sight recording was appreciated in the area. It would be appropriate here to acknowledge the debt the Society owes to the late R. Chislett who ceaselessly encouraged the then tiny ornithological section (and particularly the Recorder) to contribute to the annual ornithological report of the Yorkshire Naturalists' Union. Even in the 1970s, the style of this Society's ornithological report reveals the strong influence of the Masham ornithologist who impressed his own high standards of careful observation and accurate recording on all who were fortunate enough to enjoy his guidance.

The Section gradually established a reservoir of competent observers and whilst many important contributors have come and gone, some of the original members still regularly submit their records, albeit a little more selectively than formerly! Fresh blood has constantly flowed in the arteries of the Society, enriching the records as a result of hundreds of hours profitably spent in the field. The results are contained in the annual reports of the section published for all years from 1948 to 1972 (save 1950-54).

As a result of the years of intense activity throughout the Harrogate area, species that were once regarded as rare are now known to be regular visitors whilst regular observation at selected places has revealed changes in status of some species. For example in the fifties the Willow Tit was regarded as a scarce, local breeder; now it is much more widespread and may even out-number the similar Marsh Tit.

The first corporate field work involving the Section concerned wildfowl counts. Launched experimentally by the Recorder in 1950 and supported by teams from Wharfedale Naturalists' Society and the Y.N.U., the counts were made monthly from October to March on a number of waters in the Harrogate area, the Washburn Valley and as far south as Eccup Reservoir and Harewood Park. A nucleus of keen "duck counters" was built up and they were quickly absorbed into the national scheme of wildfowl counts which have continued ever since, resulting in close links being established with the Wildfowl Trust who organised the counts.

After building the framework of the section, the influence of the British Trust for Ornithology began to make itself felt in the 1950s. Dr. Bruce Campbell, the then Secretary of the Trust, visited the area to look at the Pied Flycatchers breeding at places like Ripley and it was a natural step for members to take part in the subsequent national Pied Flycatcher survey. As co-operative field ornithology developed, members learned to value the intensive study of individual species and over the years took part in many surveys sponsored by the B.T.O., including the Common Bird Census, inland wintering of gulls, inland wader migration and the recently completed Atlas of Breeding Birds. The policy of the section has always been to follow the lead given by the Trust, a task simplified as the Regional Representative has always been the local Ornithological Recorder!

Since 1951, bird ringing has been the particular concern of a small number of dedicated members of the section and a glance through Ornithological Reports in the fifties and sixties reveals the fascinating information brought to light as a result of the marking of tens of thousands of birds under the B.T.O. Ringing Scheme. J.R. Mather's ringing activities, mostly in the vicinity of Knaresborough Sewage Farm, developed rapidly in the 1950s and although the nearby gravel pits were lost in the early sixties, it was almost entirely due to his hard work and enthusiasm that the now well-equipped Knaresborough Ringing Station was set up on a four acre plot on the river bank adjacent to Knaresborough Sewage Farm. Studies of warbler migration have been particularly rewarding at the Station. The Ringing Team of "Sanderson, Summersgill and Walker" was also active between the mid-50s and the late 60s. Their work was often complementary to that of Knaresborough Ringing Station, being largely centred on the upper dale thus involving quite different groups of species. The exception was the team's activities at Harrogate Sewage Farm where large scale netting of Swifts, Swallows and Martins developed from 1957 onwards, shortly after the advent of the mist net, a revolutionary innovation in the armoury of the bird ringer, enabling him to catch birds in a wide variety of habitats. It was at Harrogate and Knaresborough Sewage Farms that the technique of catching Swifts and Swallows was developed, possibly on a scale at this time unequalled in the county. The main ringing effort is today concentrated at Knaresborough Ringing Station.

A further welcome development in 1968 was the showing of films of the Royal Society for the Protection of Birds in the Royal Hall, Harrogate originating from a successful appearance of the R.S.P.B. at the Great Yorkshire Show in 1967. Each year since, the general public has responded massively to the opportunity of seeing high quality films, with considerable financial benefit to both Societies. The local R.S.P.B. representative, Miss M.R. Sanderson, has ensured the efficient organisation of the shows and associated sales of R.S.P.B. goods, supported by numerous members of the Society.

It was partly due to the improved financial position of the Society aided by the successful outcome of the R.S.P.B. film shows, that it was possible in 1971 to make a donation of £100 to the Yorkshire Naturalists Trust's appeal for £55,000 to purchase Wheldrake Ings in the Derwent Valley, 400 acres of wetland near York. The appeal was successful and the site, a haunt of Bewick's Swans and duck, is now being developed as a reserve by the Trust.

Certain individuals have left their mark on local ornithology over the years and whilst it would be undesirable to over-emphasise the contribution made, nevertheless, this is an appropriate place to make acknowledgements.

Two outstanding members are, alas, no longer with us. Major C. Worrin - "Tigger" to all who knew him - held many offices in the Society, including that of President and by his energy and enthusiasm made an invaluable contribution to its

growth and success. His favourite bird-watching site was Haverah Park, conveniently adjacent to his place of work, the Army Apprentices School. Here he found Red-Backed Shrike, the only record for the Harrogate area, and then reached the ornithological heights in 1965 by finding a species new to the county, Pied-billed Grebe. Just as it has been demonstrated at Gouthwaite Reservoir and Knaresborough Ringing Station that concentrated watching of a selected area produces exciting results, so Major Worrin demonstrated that the rewards for looking at under-watched places could be handsome.

The loss of Ian Downhill at the age of 23 from an island off Sutherland in 1963 removed from the Society's ranks one of its brightest stars. He was in his third year as a Zoology student at Edinburgh University but as a schoolboy, he had already made ornithological history by discovering Wood Sandpipers nesting in Northern Scotland. The quality of his contributions to the records of the Society was obvious to readers of the Reports; he was a totally reliable observer with enormous potential.

J. R. Mather has always played an invaluable part in the ornithological work of the Society. It was almost inevitable that his many talents in a wide variety of disciplines should take him to high office and he is at present editor of the Y.N.U. Ornithological Report. Reference has already been made to the establishment of the Knaresborough Ringing Station, his brain-child, but the importance of having in the area a Station operating on virtually professional lines can hardly be over-stressed, particularly as it embraces practically all branches of natural history interest.

In 1971, the B.T.O. awarded the Bernard Tucker Medal to A.F.G. Walker (Ornithological Recorder of the Society since 1947 and the Trust's Regional Representative) in recognition of work undertaken, particularly in connection with preliminary investigations of the problem of aircraft bird strikes, the result of which led the RAF to award a Fellowship to the B.T.O. to further the study of gull movements in Yorkshire.

Space prevents mention of the valuable work undertaken by a host of past and present members but it has always been the practice to record the names of all contributors to annual reports. These lists reveal the strength of the section.

Apart from the studies of the commoner species, a great deal of interest is naturally aroused by the occurrence of rarities, liqueurs amongst the vin ordinaire.

The rarest bird ever to be recorded in the area was Pied-billed Grebe, at John O'Gaunt's Reservoir in 1965, a "first" for Yorkshire and only the second to be recorded at that time in Britain. A close runner was the Great Black-headed Gull which haunted the Lingerfield rubbish tip in 1967, another "first" for Yorkshire and only the seventh British record. Knaresborough Ringing Station in 1969 had

the first county record of Savi's Warbler. A Golden Eagle which stayed in the vicinity of Gouthwaite Reservoir from December 1970 to March 1971 was the first in Yorkshire since 1902, but more watching at the reservoir has revealed a splendid variety of the scarcer birds of prey in recent years including Rough-legged Buzzard, Marsh Harrier, Osprey and Red Kite whilst Hobby and Honey Buzzard have appeared over Knaresborough Ringing Station.

Many mostly maritime species occur inland rarely but the area has recorded a number, the most exciting of which have been Great and Arctic Skuas, all three divers, Fulmar and Gannet whilst Yellow-browed Warbler, Red-spotted Bluethroat and Red-backed Shrike, species usually only seen on the coast on autumn migration, have been found in the area.

Some of the more striking changes in status include Bewick's Swan usurping Whooper as the more commonly occurring wild swan (since 1956), the colonisation of most suitable gravel pits in the sixties by Little Ringed Plover, the invasion of Collared Dove, the disappearance of Smew as a regular winterer, the contraction in the range of Pied Flycatcher and Nightjar, the decline and subsequent partial recovery of Sparrowhawk and the increase in the number of wintering Hen Harriers. The large Wigeon flocks of the Society's early days have gone but Tufted Duck and Canada Goose have increased greatly. Some of these events are due to habitat changes in the area, others reflect pressures beyond our shores whilst the growth of recreational activities has brought intrusion to formerly undisturbed places. Doubtless we shall witness many more changes in the coming decades.

VERTEBRATE ZOOLOGY

An important feature under this section in the first Annual Report concerned the outbreak of myxomatosis in our area. This rabbit-selective virus disease had spread from Europe to S.E. England in the autumn of 1953 and within two years, it had affected nearly the whole of Great Britain's rabbit population. According to H. Swan, County Pests Officer for Yorkshire, the first outbreak recorded in the West Riding was in September 1954, on the Studley Estate. The disease spread rapidly and, before summer was over, had reached the entire Nidd valley, and by the end of the year had invaded the uplands. References made to it by the Mammals Recorder, W. Beck, made dismal reading, and he stressed the serious consequences that might follow the elimination of rabbits. By upsetting an established balance of nature, the disease would affect the feeding habits of many other species - foxes, stoats, weasels and birds of prey. Complaints about hungry foxes, he stated, were already being received from poultry-keepers. Vegetation, on the other hand, was likely to increase when not close-cropped by rabbits, and this in turn could affect insects and some birds. All members, therefore, were asked to report any changes observed in any form of plant or animal life.

Myxomatosis itself was said to be already declining by the time our report was published in 1955, and an authoritative statement by the Ministry of Agriculture, included in W. Beck's notes, states that "A weaker form is now beginning to appear in some parts of the country, from which a high proportion of rabbits recover and are thus rendered immune from attacks of the lethal strain". The truth behind these remarks became apparent in succeeding years when deformed and blind 'recovered' rabbits were all too frequently seen - and are still met with occasionally. Indeed, as late as 1970, our present Recorder, E. Kemp of Studley, stated that "myxomatosis continued to break out at various points", and again in 1971 he reported its reappearance at Knaresborough Ringing Station and in Spa Gill. On the whole, however, most of our Annual Reports record an increase in apparently healthy rabbit populations after almost total elimination in 1953-55.

Grey Squirrels also were increasing and considered a menace at that time, but against them, according to our 1955 report, the Ministry of Agriculture used other tactics to reduce their numbers. A 'two-shilling-a-tail' scheme was already in operation, but was later discontinued, the difficulties of maintaining it being obvious.

Hares were also reported to be increasing, possibly benefiting from less competition from rabbits. At all events, hares were certainly bolder about that time, making frequent forays into local gardens, and apparently showing no preference for vegetables over flowers. As many as eight were killed in one week making havoc of a Scriven Nursery garden, while in Harrogate, they were observed nipping the heads off pinks. They were also seen performing their dance in broad daylight on a lawn in the town.

No explanation of these bold invasions has been forthcoming, but the winters in the mid-1950's were long and hard, and hare's trails were often to be seen in the snow at no great distance from houses. If the decrease in rabbits was responsible, it hardly explains the continued increase in hares on arable land in succeeding years, as is shown in later Reports. In one of these Mr. Beck gives an example of such extreme boldness that it is worth repeating. Two hares were observed watching a fallen tree in which a fox had hidden another hare it had just killed. The fox retreated when the observer picked up the dead hare, but the two watching hares did not move, and though the fox later returned to the tree, presumably to look for its kill, they still remained - and the fox departed, leaving them unmolested. Mr. Beck cited this as an example of animal behaviour to be pondered over.

Another mammal, the Short-tailed Vole, was given special mention among the increasing species, when, in 1960, its numbers rose to almost plague proportions.

A remarkable event reported by the Recorder in 1961 may be mentioned here: a runaway stag, pursued by local dogs, leapt over the Railway Bridge at Knaresborough (80 feet high) into the Nidd, and swam away to the safety of Long Walk Wood.

Mammals not reported as increasing in our first or any other report, have been Otters and Badgers. Since the present Recorder, E. Kemp took over in 1965, only two Otters have been reported. In that same year, one was seen near Shaw Mills, and evidence of the other was as 'seals' or spoor only, at Sawley Dene. As late as 1969, one of the Society's Patrons, G. Dent of Ribston Hall, is quoted in that year's Report as stating that, "Otters were always here up to ten years ago, but disappeared with increasing pollution and detergent foam." The Otter records in earlier Reports, few as they are, are therefore all the more valuable. So with a combination of hunting and the newer danger from polluted water, it looks as though this island's one and only freshwater carnivorous mammal may eventually become extinct unless action for its protection is taken very soon.

Of that other persecuted mammal, the Badger, many more records are available, but in both the Beck and Kemp lists, the discovery of a new sett or evidence of successful breeding is invariably followed by a report of quite wanton destruction. Whole families can only too easily be wiped out by the introduction of lethal gas into the sett's entrance. It is widely acknowledged nowadays that ignorance of its habits is largely responsible for the Badger's continued persecution. But laws relating to such a shy nocturnal animal as the Badger are only too easily evaded, and with setts being in close thickets, often on private land, it is impossible to enforce the laws. There is a gleam of hope, however, in the Recorder's notes in the 1971 Annual Report. He refers to a Bill (sponsored by the Society for the Promotion of Nature Reserves), which was then coming up for consideration. At present only Deer and Seals come under the classification of Protected Species among mammals. This Bill sought to include certain other mammals, Badgers among them, as protected species, and it is hoped that by the time this booklet is published, the Bill will already have become law. Needless to say, no legislation can protect Badgers against motor traffic; like Hedgehogs, they seem prone to accidental death on the roads, and there are several reports of this in the Recorder's notes.

The most important part of W. Beck's first Report was the list he made of all the species recorded in our area. It was indeed the most comprehensive of its kind since Riley Fortune's day, and as such it was, and still is, invaluable as a Check List for the Society's zoologists. Of the various species, it includes Small Mammals (4), Bats (3), Amphibians (4), and Fish (21) - all with locations. With this list and the Recording Cards issued in 1956 to all interested members, this Section could hardly have had a more promising beginning. If the results did not come up to expectation, it was certainly not the Recorder's fault. The results were, in fact, disappointing, only three members returning their cards the following year.

An article by E. Kemp on the history of the deer at Studley Park since Tudor times, made extremely interesting reading in the Annual Report for 1965. In it he referred to the necessity of culling, and said that this was the only known treatment for an ailment called 'wobbly deer disease' occurring among enclosed herds. No

specific cause of the disease was yet known, but research into it was being carried out by the Ministry of Agriculture. A most interesting point in the article referred to the differences between enclosed deer and those that managed to escape and establish themselves outside the park, the latter growing bigger and bearing thicker and more richly-coloured coats. Their antlers also grew longer and carried more tines. These differences were believed to be due to the greater variety of food available in the wild.

Other vertebrates mentioned in E. Kemp's annual notes are roughly the same as those contained in W. Beck's Check List, with the emphasis, naturally, in these days of man's interference with their habitats, on population increases or decreases. Most species, happily, have maintained good numbers (apart from Badger and Otter already mentioned) and only bats and amphibians are suspected of declining, while Adders are said to have increased, probably owing to a succession of mild winters. But of amphibians, the Frog in particular has been a subject of concern and each recent Report has appealed for information about them in order to supplement a nation-wide census regarding their numbers; much more information is still required, however.

Finally, we welcome a new addition to our mammals Check List. This is Roe Deer, first sighted in our area in 1968, by the Recorder. A deer distribution map, referred to by him in 1971, notes the Roe Deer's increase in all parts of Yorkshire, but in our own area, the increase has been comparatively slow, does with kids being sighted at Sawley in 1970, but rather few in the following year.

Another mammal, not so welcome as an addition to our Check List, is the American Mink. It has long been realised that Mink escape from commercial mink farms, but reports of them in local river valleys suggest that they may have been able to establish themselves in the wild. Two reports of them came from a farm near Beaverdyke in 1966, and at least another eight were reported by G. Dent, of Ribston Hall, in the next three years, along the Nidd and Crimpe. According to the Recorder's notes, all ten of them were destroyed, and it is to be hoped that the mink will not remain permanently on the mammals list.

THE WEATHER

A background note, in general terms, about the weather in the last twenty-five years is included for the sake of completeness. A fairly detailed summary of each year's weather appears in the Society's annual reports; for the serious investigator reference should be made to the Borough Engineer who maintains full records.

The climate vitally affects all forms of life. An island with a cool, temperate climate like ours, influenced by a massive ocean to the west and a vast land mass to

the east, ensures relatively unsettled weather. Seldom does it remain the same for long. Even within the British Isles the diversity of climatic conditions is great from north to south and from east to west; our area's position on the east side of the Pennine foothills gives a measure of protection from the full force of the Atlantic gales but leaves us completely exposed to depressions which from time to time drift into the North Sea, bringing cold, onshore winds, fog, low cloud and rain/snow in quantity.

Generally in winter the most important and lasting influences are the spread of cold weather from the east, rather than from the north, and the maintenance of relatively mild Atlantic airstreams. Every winter sees the battle joined between the continental anticyclones and the Atlantic depressions; usually the latter win. In summer, we look to the spread of the Azorian "high" and associated high pressure systems for real warmth and prolonged sunshine; occasionally, as in 1959, massive high pressure systems develop in a belt from Scandinavia across the British Isles, linking with the Azores anticyclone and establishing fine, dry conditions for weeks on end, repelling or diverting the Atlantic depressions.

In a short account of this nature, space permits only passing reference to the most important and extreme incidents of weather. The effects of prolonged, severe cold probably have a greater effect on wildlife in our area than any other conditions. There have been two such occasions in the last quarter of a century, the winters of 1947 and 1962/63. The first started very late, nearly at the end of January and continued well into March; the other began just before Christmas, 1962 and finally relented 72 days later in early March. Both had severe effects on bird and animal populations, particularly the former, the more sensitive species like Heron, Kingfisher, Song Thrush, Goldcrest and Wren being decimated. The 1947 winter produced devastating frosts and impressive snowfalls (79" in Harrogate) but the very depth of snow probably gave greater protection to the ground than in 1962/3 which had far less snow. By comparison, cold spells in other years have been much shorter and far less damaging, none matching the destructive power of the two great "colds".

The records show that 1955 reigned supreme as the most sunny in the twenty-five years with a total of 1526 hours (the average sunshine total for the period 1959-69 was 1326). 1949 also broke the 1500 hours barrier and 1970 was almost as good with 1478 while the oft-quoted 1959 produced 1429 hours. 1955 was, of course, also a notably dry year with only 22" falling on 150 days but 1959 with 6 fewer wet days had 24½". By contrast, the wetter years were 1951 (38.26" falling on 186 days, 1960 (37" on 216 days) and 1966 (35.15" on 201 days). Years when the sunshine total failed to exceed 1200 hours included 1954 (1116 hours), 1958 (1195) and 1966 (1193).

Thanks to the hilly nature of our area, little permanent flooding occurs; the low-lying meadows adjoining the Nidd at Skip Bridge very occasionally have extensive floods whilst nearer Harrogate, the Nidd sometimes overflows upstream from Killinghall Bridge. The effects of light rainfall soon show themselves at

Gouthwaite Reservoir, the effective regulator of water flow from the upper dale; a dry summer and autumn causes the level at the reservoir to fall, exposing rich banks of silt at the north-west end and producing excellent feeding grounds for both resident and migrant waders and for dabbling ducks, particularly Teal. Indeed, the presence or absence of mud at Gouthwaite due to low or high rainfall has had a vital bearing on the ornithological records of the Society, as has been frequently commented upon in the annual reports.

In recent years there have been some late springs with cold, unsettled weather, often following relatively mild, snowless winters, but these have been balanced to some extent by some fine, dry autumns, the often associated stormy periods being delayed until late October or even November.

One other great and immediate influence not only on wildlife but on habitat is wind. Again space prevents detailed references but there have been some important gales in the last twenty-five years, none with such impact, however, as the two great storms of February, 1962, seriously affecting Yorkshire and destroying thousands of trees in the Harrogate area. Important habitats like the Park Wood, Ripley were so devastated that they had to be clear-felled, local species like Pied Flycatcher losing an important breeding station. The great gale of 1 March 1956, was almost as destructive. Usually gales of this strength are from the south-west or west, often associated with a deep depression over Scotland passing close to an anticyclone over France with the resulting airflow being squeezed through the gap with great power. A depression in the southern North Sea and an advancing anticyclone from the Atlantic sometimes causes severe gales from the north though these are usually less destructive than a westerly, unless in winter and accompanied by snow. These conditions were experienced in late November, 1965, when villages like Middlesmoor had snow deposits in its midst to roof-top height by gales blasting off the adjoining moorland.

Thunderstorms often severely damage plant life and leaf growth in particular. The outstanding example of a summer storm occurred on 2 July, 1968 when the storm path crossed the area, the hail pitting the bark of trees, stripping off vast quantities of leaves, devastating crops and killing large numbers of game birds. The path of the storm was from Liverpool to Stockton-on-Tees and whilst Harrogate and Ripon were directly affected, Knaresborough virtually escaped.

APPENDICES

1. Publications:

Check List of the Birds of the Harrogate Area, 1961.
 Check List of the Macrolepidoptera of the Harrogate Area, 1966.
 Bird-watching around Harrogate: No. 1. Gouthwaite Reservoir 1967.
 The Valley Gardens and Pinewoods Nature Trail, 1970.

2. Acknowledgements to land-owners and other bodies:

The Allerton Park Estate.
 The Water Engineer, Bradford Corporation.
 The Engineer to the Claro Water Board.
 The Forestry Commission.
 The Borough Engineer, Harrogate Corporation.
 The Entertainments and Publicity Department, Harrogate Corporation.
 The Parks and Gardens Department, Harrogate Corporation.
 The Borough Treasurer, Harrogate Corporation.
 Major Sir Joslan W.V. Ingilby, Bt.
 The Nature Conservancy.
 The Nidd Estates.
 Mr. and Mrs. J.M.H. Wheelwright.

3. Societies to which H. & D.N.S. is affiliated:

Yorkshire Naturalists' Union:

Founded in its present form in 1867 and consisting of over 40 local Natural History Societies together with individual members, the Y.N.U. aims to encourage conservation, to promote the thorough and systematic investigation of the fauna, flora and physical features of the county of Yorkshire, and to provide facilities for cooperation between naturalists. Holds indoor and field meetings and publishes the quarterly journal "The Naturalist" and a Newsletter. A special Committee, the Protection of Birds Act Committee, was established in 1900.

The Yorkshire Naturalists' Trust:

The Trust was founded in 1946 to conserve areas of countryside throughout Yorkshire for interest and enjoyment, for scientific study and educational purposes. The Trust buys or leases suitable areas and manages them as Nature Reserves: more than 30 had been established by 1972. Publications include a set of Reserve Cards, several Nature Trails and informative booklets, Newsletters and an Annual Report.

3. (continued)

The British Trust for Ornithology:

Founded in 1932 to promote the scientific study of birds in the field - thereby providing the facts on which the conservation of bird life in Britain depends. Amateur and professional ornithologists are involved in cooperative inquiries, including the bird ringing scheme, single species studies, the important Ornithological Atlas, soon to be published and a projected Register of Ornithological Sites. The B.T.O. runs national and regional conferences, a library, and has a network of Regional Representatives. Publishes the quarterly "Bird Study" and "B.T.O. News".

The Royal Society for the Protection of Birds:

Founded in 1889, the Society for the Protection of Birds was granted its Royal Charter in 1904, to encourage the better conservation and protection of wild birds. Its many activities include reserve acquisition and management, research, film production and distribution, law enforcement, education, and sales. Regional offices are supported by a network of Regional Representatives and members' groups, the Young Ornithologists Club catering for juniors. Publishes "Birds" bi-monthly.

The Botanical Society of the British Isles:

The senior botanical society in Great Britain, founded in 1836, covering flowering plants, ferns and their allies and stoneworts. Publishes two journals: "Watsonia", named after the Victorian botanist, H.C. Watson, and "Proceedings". The Society was responsible for the maps scheme, in which hundreds of amateur and professional botanists took part - resulting in the publication in 1962 of the "Atlas of British Flora".

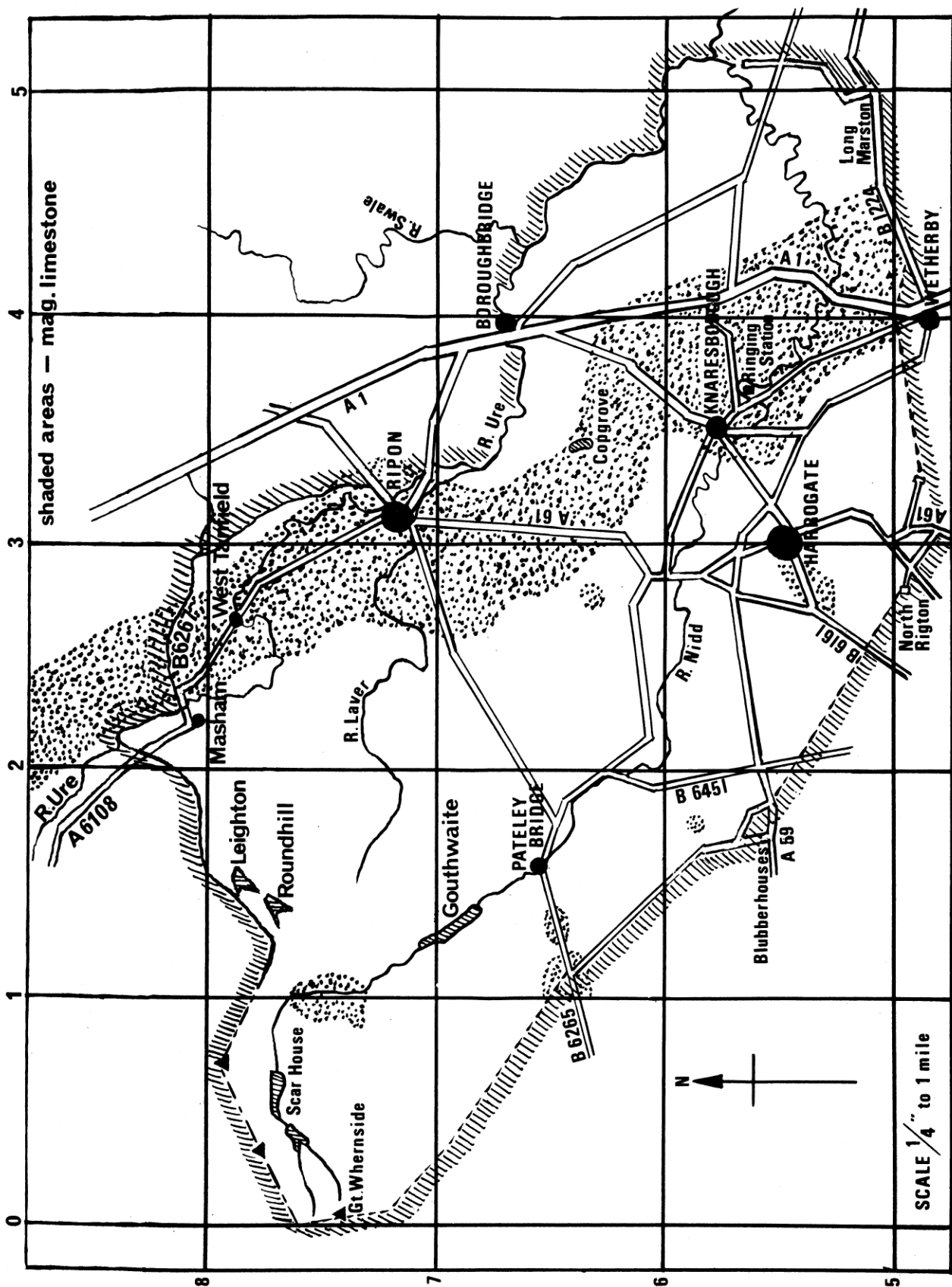
ACKNOWLEDGEMENTS

I would like to express my gratitude for useful information received from the following:

W. Beck, Knaresborough
F. E. Branson, Knaresborough
G. Harrison, Pateley Bridge
Miss H.M. Jackson, Harrogate
H.T. James, Editor, Y.N.U. Newsletter
D.M. Jesper, Harrogate
Mrs. D. Johnson, Harrogate
Miss C. M. Rob, Thirsk
C. Simms, The Yorkshire Museum, York
A.F.G. Walker, Harrogate
Miss D. R. Walker, Harrogate
C. W. Webb, High Shaw Mills

and above all, to Miss C.M. Holmes, for continuous help, advice and criticism during the writing of this book; and to Mrs. M. Ogilvie, our Hon. Secretary, who most generously gave her services to undertake the worst task of all, that of typing out the entire MS for printing.

E. M. S. Newfield.



HARROGATE AND DISTRICT NATURALISTS' SOCIETY - AREA FOR STUDY