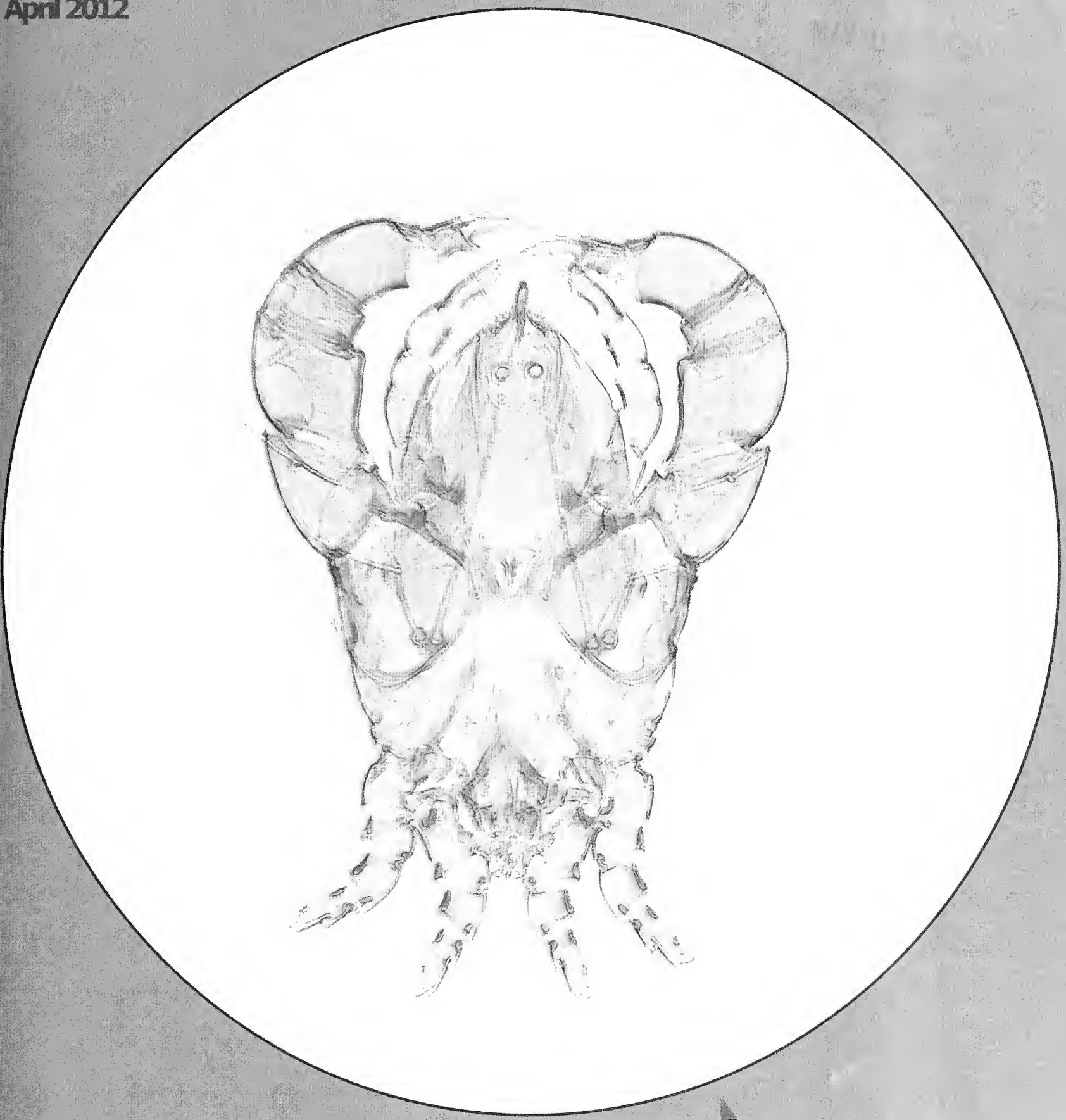
The Naturalist

Volume 137
Number 1079
April 2012



Journal of Natural History for the North of England

Yorkshire Naturalists' Union

The Naturalist
Vol. 137 No. 1079 April 2012

Contents

An asterisk* indicates a peer-reviewed paper

Front cover: Feather mite *Analges mucronatus* m. Compare this with the quill mites illustrated on p31. Photo: B.Nattress

Back cover: Dark-bordered Beauty moths *Epione vespertaria (Upper: male, Lower: female).* Strensall Common is its only English site (see p11). Photo: D.Baker

Yorkshire Naturalists' Union

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Editorial

From its inception in 1861 two of the Yorkshire Naturalists' Union's main concerns, as befits a society predominantly of field naturalists, have been the recording and conservation of the County of York's fauna, flora and habitats. To achieve these aims the Union's founding fathers devised a programme of field meetings and reports, which has now developed into a system of five main Excursions per year, one in each of the five Watsonian Vice-counties, loosely rotating from Spring to Autumn over a five year period, each attended ideally by representatives of all the society's Sections, and documented historically in the Excursion Reports printed annually in *The Naturalist*. This programme of Excursions is complemented by numerous individual Sectional and group meetings throughout the year, with reports and lists of the species encountered.

The core of our recording activity clearly lies in the fieldwork and resultant reports and lists from each year's five main Field Excursions, aimed at some seasonal coverage of the County's creatures. We, the present members of the Union, like our predecessors, find pleasure and satisfaction sharing in this pattern of fieldwork and furthering our knowledge and understanding of Nature from the accounts in these reports, present and past. The Excursion Reports thus form a spinal element in the Union's life. Their overall purpose, unchanged over a century and a half, is aptly summarised in the epigraph, taken from Wordsworth's *Prelude* as the motto for the YNU's 2003 Conference on 'Recruiting and Training the Next Generation of Field Naturalists':

> "What we have loved,
> Others will love, and we will teach them how."

As such, the Excursion Reports are probably among the most frequently and widely read features in *The Naturalist*, offering not only a record and reminder of field events but also an opportunity of vicarious attendance for members unable to be present. They gain, of course, immensely from the variety and individuality of approach and tone adopted by their diverse contributors, and the overall principles guiding their collation and editing have not changed significantly over their long history. A brief reminder of these principles appears as an 'Appendix: Hints on the production of Excursion Reports', attached to the 'Style Guide for Contributors to *The Naturalist*' at the rear of this issue, but their appeal for a measure of consistency is in no way intended to discourage or inhibit individuality of style or approach on the part of any contributor of a report. The collators of the Excursion Reports, the Editors of *The Naturalist* and the Union membership remain indebted to all such contributors.

Dr Roger Key: President of the YNU, 2011-2012

Originally from Scunthorpe in Lincolnshire, my PhD was at Hull on the Humber's estuarine invertebrates and I first worked as Development and Biological Survey Officer for the Radnorshire Wildlife Trust. Thence to the Nature Conservancy Council/English Nature/Natural England where I worked on conservation of invertebrates and their habitats for over 25 years, becoming Senior Specialist in Invertebrates, before capitalizing on the educational work that I did in that role – from tots' minibeasts safaris to PhD studentships – to become Senior Education Specialist for Natural England. I eventually retired (early!) to become an independent ecological/entomological/environmental educational consultant where my work includes lecturing/advising course content for 11 universities and continuing children's invertebrate work.

I have been a member of both the Yorkshire and Lincolnshire Naturalists' Unions since the 1970s and organised the first joint meeting between the two for 75 years in 1988 (at the same site as the previous one in 1913 – Risby Warren near Scunthorpe). I was President of the LNU in 1995. I have spent most of my efforts with both organizations among the entomologists, being especially interested in beetles, and collated the Invertebrate Site Register for Yorkshire (now largely incorporated in the NBN) with much help from the YNU entomologists in the mid-1980s. Having lived 80% of my life in Lincolnshire, I've recently moved to Yorkshire – to Carthorpe, near Bedale in VC65.

I'm probably best known for my photographs of invertebrates (see http://www.flickr.com/photos/roger_key/), which have been published by over 300 organizations in 18 countries. In 2009 my wife Rosy (also an entomologist) and I undertook a 6 week research expedition for BugLife, to South Georgia in the Antarctic, looking for alien invasive invertebrates. Unfortunately we were successful in finding an additional 15 or so species new to the island that shouldn't be there.

Other than that, I've done much media natural history over the last 25 years, presenting variously on BBC's Countryfile, the Countryside Hour, etc., - and made the Christmas afternoon special 'Auntie's Bloomers' with a spectacular trip over an old tree at Duncombe Park!

In real life I'm a keen gardener, cook, photographer and travel fanatic.

I only wanted to watch the birds

John Wint

Presidential Address to the Yorkshire Naturalists' Union at Ripon on 19th November 2011

When originally asked to provide a title for my presentation I suggested 'A Tale of 7 Cs' but, on reflection the above is more suitable. I'm going to tell you a little about myself and of my journey to where I am today and I will say what the 7 Cs are.

Like others who have already spoken today – our honoured guest, Simon Warwick, and my successor as President, Roger Key – I am I'm afraid not a true Yorkshireman. I was born in Chesterfield (the first C), Derbyshire but very soon moved into Yorkshire where I grew up in an area of south Sheffield called Totley and on Chatsworth (the second C) Road, an excellent sledging track in winter. It was here that my earliest wildlife memories were formed and I returned to my childhood haunts for the first time in a long time in July 2011. The place looks very much as it did fifty years ago and the house I lived in is still there. The present occupants were kind enough to let me take a few photographs.

I well remember swinging in the apple tree which still grows in the garden and my earliest ornithological memories are from this garden where I can still picture Song Thrushes *Turdus philomelos* beating snails on the stone driveway. When I was very young and during summer months went to bed before dark, I used to listen to the Swift *Apus apus* family parties screaming around the nearby houses. I didn't see any Song Thrushes during my return visit in 2011 but I did hear Swifts, which must still breed in the area, and listening to that sound was extremely nostalgic.

I had no real parental influence towards an interest in natural history and birds in particular but perhaps there was something subliminal coming from my father who spent the first fifty years of his life in Totley and so was something of a 'country boy' surrounded then by countryside and wildlife. I still have in my bookcase a volume entitled *Birdland's Little People* by Oliver G Pike and this volume was presented to my father in 1927 as a school reading prize. Interestingly its presentation label bears the name of the Royal Society for the Protection of Birds and perhaps seeing this book as a child was the first seed of my ornithological interests? Whatever the seed which had been planted, an interest in birds surfaced when I was in my early twenties. This interest has blossomed and grown ever since and remains as strong today as it has ever been.

Having failed to achieve the required grades for a university place to study languages, I looked around for a job, not really having much idea what I wanted to do, but I was directed towards an insurance company which, maybe inevitably, had an ornithological title – Eagle Star. Sadly, following a takeover, this company no longer exists but I spent a very happy thirty-five years with them, my whole career involving handling claims (the third C) arising from motor and industrial accidents as well as those arising from household catastrophes and all manner of other incidents.

There came a time in late 1999 after the company had been taken over when the 'axe man' arrived to tell me that my services were no longer required, so my career came to something of an abrupt end. Being 'invited' to go away and tend my garden wasn't an entirely

devastating experience. In fact I was rather delighted, the friendly working atmosphere I had so long enjoyed having disappeared with the arrival of new employers.

I wasn't desperate to find alternative employment but I needed something else to do with my time. For a number of years I had thought that doing something involving natural history and birds in particular would be a wonderful change of direction. I considered a number of options and while looking around the locality where I now live (to the south of Selby), I came across what looked like flooded arable fields, which I decided to investigate.

After a couple of visits, it became very clear to me that this was a birding site of some interest and potential but without landowner permission I was reluctant to keep visiting. Fortunately, the two farmers who own the affected land have been very kind to me and I have visited the site regularly ever since the end of 1999. Those landowners are Guy Poskitt, whose main business is growing carrots (the fourth C) for a major supermarket chain and Mike Brears, an arable farmer who has also specialised in breeding and showing Simmental cattle (the fifth C). I soon discovered that the flooding in their land was a consequence of coal (the sixth C) mining subsidence arising from mining activities emanating from the nearby Kellingley Colliery.

The whole area in which the fields and Colliery are located lies at the southern end of the Vale of York and is rather flat land with few notable features other than Bishop Wood, Brayton Barff and Eggborough Power Station. The Aire & Calder Navigation canal and the M62 run through the land to the south of 'my' birding site which had already been given the name 'Beal Carrs' before I discovered it.

So, where exactly is Beal Carrs? It lies just to the south of the River Aire in a dip in the arable land between the villages of Beal (to the west) and Kellington (to the east). About a mile to the north, across the Aire, is Birkin village. Kellingley Colliery is a little over a mile to the south-west; Selby is about six miles to the north; the Lower Derwent NNR is a bit further to the north-east and the RSPB reserves of Fairburn Ings and Blacktoft Sands are, respectively, five miles to the west and fifteen miles to the east. Guy Poskitt's farm lies less than a mile to the south and Mike Brears' farm is located a few hundred yards to the west.

So, in late 1999/early 2000 I found a water area in fields. At the time the water covered around eight to ten acres and was mostly very shallow. There was virtually no non-agricultural vegetation except for a single bush but there was a very good mud margin which was already proving attractive to wading birds.

Even prior to the subsidence, the land was served by a drainage system under the maintenance of the local Internal Drainage Board and the main drain (Marsh Drain) had provided a source of irrigation water for use on the adjacent land. Even after the early formation of Beal Carrs, part of the surrounding land held a crop of carrots but because it was felt there was a risk of contamination from the standing water in the subsidence flash, the crop had to be sprayed off and ploughed in. In due course, quite an area of the land surrounding the flash was declared unfarmable with the former carrot field being converted to cattle grazing and sown with a suitably slow-growing grass mixture. Unfortunately and probably because of the residues of agricultural nutrients in the soil, the grass still grows much faster than it should though I am told that, in due course, this extra growth will slow as the nutrient deposits are depleted.

All of the land, from Knottingley to the west to the point where the Aire meets other rivers, is flood plain and floods almost annually, though at different times of the year. The worst flooding 'in living memory' occurred in 2000 when flood water stretched from a point very close to Mike Brears' farm all the way east, behind Kellington village, to another village called Gowdall some six miles away. The flooding made the news with television programmes showing Kellington residents frantically sandbagging behind their homes in the middle of the night. The result of this flood was a water area said to have been larger than Lake Windermere! The high water mark on the southern side of Beal Carrs was at a point where there is now a pair of five-barred wooden gates suggesting that Beal Carrs itself had suddenly become around twenty feet deep.

Whenever the River Aire overflows, much debris is washed downriver with all manner of items washing up on the banks. All of this has to be cleared by the Environment Agency and anything which cannot be taken away is burned in situ.

As time has gone on, Beal Carrs (see Plate I, centre pages) has developed from being a flash with no vegetation into a lake covering twenty acres (8ha). There has been no non-agricultural planting around the Carrs and all plant life which can now be found there is self-seeded, coming from the existing seed banks or arriving by natural processes .

From my earliest days of visiting the site it has been obvious there is considerable wildlife potential and that there was a need for some form of protection so far as possible, bearing in mind that the farmland is privately owned and has no general access. There is a public footpath which follows the banks of the Aire to the north of Beal Carrs and, to the south, a permissive path which leads from the public road down towards but not as far as the water area. This permissive path used to be known locally as Cow Lane. I assume that cattle were once to be seen there and it is perhaps a little ironic that the 'accident' of the mining subsidence has brought about an unplanned return of cattle grazing.

With the achievement of protection in mind, I began to produce bird reports for the landowners, commencing with a report for 2000. These reports were mainly intended to inform the landowners and any other interested parties, with the farmers using the data I was collecting to support applications for grants under Countryside Stewardship schemes. However, I felt that the reports alone were probably not going to achieve any real progress towards site protection, so I also managed to get myself invited onto the Selby Biodiversity Action Plan working group which was initially led by Graham Megson from North Yorkshire County Council. Beal Carrs became one of the wildlife sites mentioned in the plan and, in time, arrangements were made for an invertebrate survey to be undertaken by Martin Hammond so that my bird records could be augmented with invertebrate data. Martin's survey was done in June 2004 and he concluded that "the subsidence lake at Beal Carrs could prove to be very interesting ecologically." The data which had been gathered enabled the site to receive designation as a Site of Interest for Nature Conservation (SINC) in support of which a notice was erected by the permissive path, briefly describing Beal Carrs as "a haven for birds", and indicating that "a variety of wildfowl, waders and farmland birds can regularly be seen, including declining species such as Grey Partridge, the Skylark and the Lapwing which breed here." The notice also advised readers that "the grassland is grazed by cattle to maintain suitable conditions for ground-nesting waders, whilst elsewhere on the holding, grassy field margins, blocks of wild bird mix and over-wintering stubbles provide nesting and year-round food for other bird species".

Sadly the notice itself is only at A4 size and is positioned quite low to the ground, where it frequently becomes partly concealed by growing vegetation so that there is little incentive for anyone to read it. Furthermore, the statements that there are grassy field margins and over-wintering stubbles are somewhat fanciful as the margins mostly are cut for silage in autumn and the intensity of the arable farming in the fields means that stubbles seldom, if ever, remain over winter to provide a food source for birds.

I continued to produce bird reports up to 2005, only ceasing publication because of time constraints and a much reduced need for the data locally. However, my Beal Carrs bird data has continued to appear, where relevant, in the County Bird reports published by the Union. Stopping my own bird reports did not mean that I ceased to publicise the 'reserve' completely. I have been lucky enough to get a paragraph summarising bird records published in the nationally produced Birdwatching monthly magazine and I have contributed my data to the Wetland Bird Survey (WeBS) each month. Most recently, I was asked by Guy Poskitt to write a short piece for the magazine of the National Farmers' Union – *Farmer and Grower* – and my piece was published in November 2011. In it I was able to briefly describe Beal Carrs and its wildlife and I also took the opportunity to mention YNU and its 150th Anniversary in 2011.

Although mining activities beneath Beal Carrs had ceased, their effects continued and the subsidence still takes place even today, though at a much slower rate now than in the early years. The continuation of the subsidence caused the landowners to become concerned that the existing drainage system would silt up. A decision was made to create a bypass drain, 900m long, on the south side of Beal Carrs' water area and work on this drain began in October 2004, being completed by January 2005. As with the area generally, the freshly disturbed soil forming the sides of this drain quickly developed its own vegetation without any planting and the growth has continued. Unfortunately, little or no maintenance has been undertaken on the drainage system at Beal Carrs beyond an occasional cutting of the drain sides. The continued subsidence has eventually resulted in the main drain (Marsh Drain) 'breaking its back' so that there is now little flow of water out of Beal Carrs except during periods of flood. Furthermore, the bypass drain itself has become blocked by silt arising from soil run-off from an adjacent field. Presently there is only very limited changeover of water within Beal Carrs and though I have no evidence to support my theory, I am concerned that the continuing run off of agri-chemicals from surrounding fields is adversely affecting water quality. This tends to be supported by a reduction in water bird numbers in recent years with species such as Mallard and, in particular, Coot being far less numerous and, in the case of Coot, breeding far less regularly.

The surrounding arable land is constantly worked and the usual cycle followed through ploughing, seed-drilling to crop growth and treatment by pesticides, fertilisers, etc. Once grown the crops – which are almost invariably seed or root crops – are harvested before the whole cycle begins afresh. As I have said, above, only rarely is stubble allowed to remain for any length of time and there is virtually never any stubble remaining throughout a winter period, so that feeding opportunities for wintering farmland birds are few. In addition to the absence of any stubble, the frequent severe flailing of hedgerows means that food for most passerine species is pretty scarce. I have operated a winter feeding station using seed kindly donated by a local corn mill and this proved very successful in terms of attracting good numbers of finches and buntings to one of the very few areas of hedgerow at the site. Sadly the supply of seed no longer exists and the area where I used to operate the feeding station is now regularly frequented by dog walkers so that, whereas it used to be virtually undisturbed, there is now a much more restricted opportunity for birds to gather and feed.

All of the soil around Beal Carrs is very sandy in texture and regularly blows away at times before it is seeded. This results in frequent dust 'storms' blowing across the area. Because of the dryness of the soil, irrigation of crops is necessary with water extracted under licence from Beal Carrs. At times, some of the root crops are covered with a white plastic mesh which allows air and moisture in but, hopefully, keeps 'harmful' insects out. Ironically, this mesh seems to provide a good food source for birds. I assume that the attraction of the crops beneath the mesh, as well as the relative warmth which the mesh generates, causes quite large numbers of invertebrates to settle on top of the mesh. This has not gone unnoticed by the local bird population, including Yellow Wagtails and even Swallows which I have seen walking around on top of the mesh feeding happily on the insects they find there. On the down side, the mesh does have the appearance of water to the unwary bird and on a few occasions, Mute Swans have landed on it. Unable to gain purchase for take- off, these birds have become exhausted and stranded on the mesh so that it has been necessary for me to 'rescue' them. This is easier said than done! Although exhausted and unable to fly away, the swans are still able to flap and walk across the mesh and catching them – rather like chasing something over a bouncy castle – can take quite some time but I haven't failed to do so – yet! I have seen a few birds beneath the net including Reed Buntings and Pheasants. I have assumed that there is sufficient food and moisture for them to survive or that they have eventually managed to find a way out from beneath the mesh.

On a field alongside the permissive path a rather unusual 'crop' was planted in autumn 2011. This was a plant called foil-sis which, I am told, is used to 'deal with' the nematodes which remain in the soil and attack potato crops. The plant has remained in flower until November 2011. It has sharp thorns on its stems and apparently produces seed but sadly the 'crop' was cut and ploughed in before the seeds emerged. I had hoped the seeds might provide some winter food for farmland birds.

Because of the lie of the land at Beal Carrs and its dish-like profile, disturbance is both a potential and real problem. Anyone approaching the water area is easily seen by water fowl resting and feeding there and very often the birds quickly take flight. Disturbance takes a variety of forms from Rook-shooting, locals taking a stroll, with or without their dogs, children making dens from straw bales or camping by and swimming in the water, to older youths on motor cycles – and worse! The local hunt passes through occasionally with landowner permission but any disturbance which the hunt causes is short-lived.

The whole district around Beal Carrs is commonly affected by poaching activities with wheel tracks regularly appearing across planted fields. The damage to sown crops has prompted the farmers to install large hay bales at field entrances in an effort to deter the poachers. Largely this seems to be working but even locked and chained five-barred wooded gates don't stop the more determined of these undesirables. They simply drive their 4x4s straight through the gates, pulling the end posts from the gates themselves. Evidence of their activities was found nearby very recently with a Roe Deer carcass being discovered, trussed and bagged, by one of the local roads.

I have seen young men with Lurcher/Greyhound-type dogs and even with high-powered rifles fitted with telescopic sights and silencers. I can only speculate on quite what they were hoping to shoot. The presence of wildfowl almost inevitably attracts freelance shooters. There is, however, organised shooting allowed on the site and I have a good relationship with this shooting party. From time to time even the military joins in the disturbance with low-flying aircraft fairly regular and Chinook helicopters quite frequent as they head to and from the A1 trunk road, a route which they seem to follow to and from their various bases.

Just to the south of Beal Carrs is the Kellington Parish Church of St Edmund which dates back to 1185. The village of Kellington itself – originally Chelincote – was recorded in the Domesday Survey and the whole area around Kellington village has a very long history, with evidence of activity as early as the Romans. Because of this long history the fields around Beal Carrs are a regular searching place for metal detectorists. The fields have been worked by these people for over thirty years but still continue to turn up small 'treasures'. For example, in winter 2010/11 one gentleman showed me a Roman denarius from 31AD and an Elizabethan clothing clasp which he had unearthed in just over half an hour of searching.

On the whole, Beal Carrs provides 'good news' but from time to time dark clouds gather over the area and some have potentially 'nuclear' effects. For example in 2008 the area close to Beal, Kellington and thus Beal Carrs was put forward as a suitable location for an eco-town with something like thirty thousand inhabitants. Fortunately, that idea was shelved but a more recent development is the proposal for a wind farm almost directly across the River Aire from Beal Carrs. A test mast was in place for some time though it has now been removed and I am led to believe that in the whole of the Selby district there are around fifty applications for the siting of very large wind turbines. There is much local objection and it remains to be seen whether the turbines appear.

Publishing my records attracted the attention of the Parish Councils in Beal and Kellington with the result that Kellington Parish Council featured Beal Carrs on their village website. Eventually, the Parish Council decided they would embark upon what they called 'the Beal Carrs project.' This project had good intentions in that it aimed to enhance awareness of the existence and importance of Beal Carrs but initially there was no consultation with either landowner or with me, despite the project being about a piece of privately owned land to which there was no general access and being based solely on the data I had published. However, in 2011 potential obstacles were largely overcome and, with financial support from North Yorkshire County Council, professionally designed leaflets were eventually produced for distribution to every household in both villages. Additionally, the same designers created display panels to be placed in each village. The aspiration of all this work is to inform the local population of the wildlife 'gem' they have on their doorsteps. It remains to be seen whether this increased publicity has positive or negative effects. There was a little 'local difficulty' over planning permission for the notice boards erected to house the display panels but this 'difficulty' has now been overcome.

But I really only wanted to watch the birds, though I sometimes become distracted by what I also see at Beal Carrs. For example, there are fungi such as the Orange Peel and plants such as Foxglove and Germander Speedwell. Mammals frequently seen include Brown Hares, Roe Deer and Red Foxes though Rabbits are now seldom seen, the population having been 'humanely' removed. There are also respectable lists of odonata and lepidoptera. The odonata include Common Blue, Blue-tailed, Emerald and Large Red Damselflies as well as dragonflies like Four-spotted Chaser, Black-tailed Skimmer, Brown, Common and Migrant Hawkers and the occasional Emperor. Butterflies include Small Tortoiseshell, Peacock, Common Blue, Small Copper and a few Speckled Woods with Meadow Browns, Gatekeepers and Ringlets regularly recorded and Red Admirals and Painted Ladies appearing in season.

But I really, really only wanted to watch the birds. Up to the time of this presidential address, the species count at Beal Carrs is one hundred and seventy-nine. I do not propose to list them all here but they include good resident breeding populations of species such as Mallard and Tufted Ducks. Shelduck and Teal are regular and have bred, though Teal only

once. Winter visitors include Goodsanders, Pochard, Pintail and the occasional Smew. Little and Great Crested Grebes have become far less regular since the rise in water level and consequent demise of the mud margin and, I think, the reduction in water quality resulting from the chemical run-off into the water.

Until the land drainage system became blocked there used to be a good mud margin around Beal Carrs and this attracted a range of wader species with three (Little Ringed Plover, Redshank and Oystercatcher) having bred, the last breeding for the first time in 2011. Other species regularly passing through include Greenshank and Dunlin. Golden Plovers used to show in good numbers in late autumn but for a few years they became rather scarce. However, in 2011 they have reappeared with a flock of over 3000 birds being seen in the air at times.

Beal Carrs is on a flight line for Pink-footed Geese passing between the north-west of England and East Anglia with counts of up to two thousand having been made from skeins averaging around one hundred and fifty birds. Mute Swans are common with both breeding and wintering populations though breeding has not occurred for a few years. The wintering birds tend to spend their days feeding and resting at Beal Carrs or feeding on arable fields in the area, usually to the north of the River Aire. Numbers regularly exceed fifty birds. Little Egrets have been seen since 'the early days' and in recent years have become more frequent. There was a single Great White Egret in 2000 which attracted over one hundred visitors to the Carrs until it was flushed by an over-zealous photographer!

There used to be a set of power lines running south-north across the eastern end of the water area and these lines occasionally resulted in high speed collisions by Swans, mostly with fatal consequences but even the carcasses weren't wasted as they provided a good food source for the local Foxes and other carnivorous mammals.

Breeding farmland species include Grey Partridge, Linnet, Yellowhammer, Skylark (less frequent now) and a very small number of Corn Buntings. The district around Beal Carrs was a stronghold for Corn Buntings in years gone by but, sadly, this is no longer the case though at times flocks of around thirty can be seen in winter. Similarly, Skylarks are more common in winter and I have recorded flocks of more than one hundred birds at times.

Until 2011 the habitat has not been ideal for any concerted bird ringing effort but this year has enabled me to undertake many more ringing days than in previous years. I have caught and ringed good numbers of birds of a range of species and my efforts have added species to the overall Beal Carrs list including a rather unexpected Treecreeper. The species of which I have caught most is the Reed Bunting with three hundred and seven individuals trapped between 30th July and 17th November. Of those, two hundred and eighty-nine were previously unringed and are assumed to be a part of the dispersing British Reed Bunting population. One bird, caught on 31st August 2011 had been ringed as a first year bird on 26th September 2006. All of the ringing data I collect is fed into the national database held by the British Trust for Ornithology.

Summer visitors to Beal Carrs include Sedge Warblers, which have been recorded annually. Presumably, before the formation of Beal Carrs they used the margins of the land drainage system for breeding.

Probably the most bizarre species to occur so far is Leach's Petrel with a single bird seen flying westwards across the Carrs on 6th October 2004.

The ‘star’ species for the site is the Whooper Swan. There is a good wintering population of these birds at the relatively close Lower Derwent NNR and, from the initial formation of Beal Carrs, some of these birds have chosen the Carrs as their winter roost. Like the Mute Swans, they graze locally in nearby arable fields, though interestingly not the same fields as the Mutes. The winter roost at Beal Carrs can number as many as sixty birds and I believe this is the second largest gathering in the County, the largest numbers being found by the Lower Derwent. I make frequent evening visits during the winter to observe these swans coming in to roost and they are often accompanied by an equal number of Mute Swans, the arrival of the whole herd making a quite spectacular sight at last light. Whoopers also frequent Beal Carrs during the day from time to time during their stay. It is known from details taken from ringed birds that the Whoopers arrive from Iceland having travelled via Scotland, Ireland and the north-west of England. Ringing details also confirm that some of the birds seen at Beal Carrs have also frequented the Lower Derwent NNR so there is, I believe, some interchange of birds between the two sites, additionally evidenced by a fluctuation in roost numbers at Beal Carrs.

I have made some good friends of local residents, many of whom are keen to ask me to identify birds for them or to let me know what they have seen, either in and around the villages or at Beal Carrs. Additionally, they will let me know if they have seen anything untoward occurring at the Carrs, sometimes even going so far as to note down the registration numbers of ‘suspicious’ vehicles. One local lady has been kind enough to provide me with copies of two photographs she took of Cow Lane in the late 1970s when it looked considerably different from how it is now. In those days there were hedgerows and trees but not long afterwards, farmers were paid to dig up these features. Now, of course, they are being paid to put them back again!

It is usual to close presentations of this type with a sunset but because the Swans usually do not arrive until last light, the scene I leave often looks like this night-time shot of Eggborough Power Station.

I keep all my Beal Carrs records in a database which allows me to investigate all kinds of interesting information including the number of visits I have made which until yesterday (18th November 2011) totalled 3303 and, at an average of three hours per visit, I have spent some 413 (24-hour) days at Beal Carrs so far. I wonder what my final total will be? I don’t want to know for many years yet, thank you!

In conclusion I would like to thank Yorkshire Naturalists’ Union for doing me the great honour of electing me as their President in this auspicious 150th Anniversary year and I would also like to thank the two Beal Carrs landowners – Guy Poskitt and Mike Brears and all their colleagues for being so generous to me in allowing unrestricted access to their land. Thanks are also due to the residents of Beal and Kellington villages, who have supported me as I have watched and recorded Beal Carrs, and to Graham Megson and Matt Millington from North Yorkshire County Council for their professional support. The opportunity to observe and record a new wildlife site, almost from day one, is not given to many and I have been extremely lucky.

Yorkshire's Dark Bordered Beauty

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Introduction

The rare Red Data Book species Dark Bordered Beauty *Epione vespertaria* is a small geometrid moth with a wing span of approximately 25mm - or to most of us, one inch (see back cover). The male has orange forewings with many short transverse markings of a darker shade, a darker and almost continuous inner cross line and a wide darkish-red border running almost parallel but wavily to the outer edge. The hindwing is similarly marked but minus the dark inner cross line. The female, however, has yellow forewings with finer and paler transverse markings and a dark dot in the centre of each wing. The inner cross line and outer border are pale reddish and the border, having a deep indented outer cross line, diverts to the apex of the wing. The hind-wings are also yellow, minus the inner cross line, and the border, although waved, is parallel throughout. The adults fly from late June into early August and the eggs are left to over-winter on the food plants before emergence of the larvae in May. The moths inhabit damp scrubby heathland areas in which the larval foodplants are found, these being Creeping Willow *Salix repens*, on the English site and Dwarf Aspen *Populus tremula* on the Scottish sites. Dr Mark Young comments that "The Dark Bordered Beauty *Epione paralellaria* places its eggs fully exposed on the slightly roughened bark of the aspen, this is typical of species over-wintering in this stage" (Young, 1997).

Present indications are that the moth is now extant in only the one English site at Strensall Common and a small number of sites in Scotland. Three sites in the Cairngorms were reported in the Spring 2003 issue of *Butterfly* (Butterfly Conservation 2003)

Historical Notes

Rev. F.O. Morris (1810-1893) was born in Cork, Ireland, but spent the majority of his life in Yorkshire at Nunburnholme Rectory near York. He wrote regarding the Dark Bordered Beauty, but only using the binomial nomenclature of *Epione vespertaria,* "localities for this species are near Stockton Station and Stockton Common near York and Lyndhurst in the New Forest. The situations where it is found are heathy places, the moth chiefly addicting itself to the dwarf sallow." (Morris,1871). Stockton Common adjoins the south-east boundary of what we now know as Strensall Common, the present English stronghold of the Dark Bordered Beauty.

A side-line comment from Reverend Morris states that, "The name of this moth furnishes me with an argument against those who advocate the adoption of an exclusively Latin nomenclature by even persons who have never been put to the trouble of learning any other than their mother tongue……. I one day received the intelligence that a brother entomologist had recently captured and killed some two hundred '*Presbyterians'*. It was, in fact, made a matter of boast.". It is surprising, therefore, that his own book does not always use the vernacular, or common, names; identification of some of the species in the book is relatively difficult considering that many of the scientific (not necessarily 'Latin') names have often changed over the years.

George T. Porritt (1848-1927), born in Huddersfield, covers the Dark Bordered Beauty in his 'Yorkshire Lists' published between 1883 and 1922 which were, as all members should know, brought up to date in 2011 by a joint Yorkshire Naturalists' Union/Butterfly

Conservation initiative. Back in 1883 Porritt stated that, “Sandburn, about six miles from York, is the only British habitat for this pretty species, but it occurs there in great abundance, the larvae feeding on the dwarf sallow”. He also says that a specimen had been found near Beverley 24 years previously (Porritt, 1883). Later he states that Yorkshire “cannot now claim to be the only British habitat for the insect, as since 1887 it has been taken in some numbers at Adderston-Lea Moss in Northumberland” (Porritt, 1904). Sandburn Wood and Sandburn House are adjacent to the Stockton Common site mentioned by Morris and presumably were better known localities at the time.

Edward Meyrick, in his *Handbook of British Lepidoptera,* merely states that the moth is found, “In England to York, local” (Meyrick,1895) whereas J.W.Tutt agrees with Morris and says, “…it is confined to York and the neighbourhood of Lyndhurst and Bournemouth” (Tutt, 1896). F.E.Hulme, however, compares the Dark Bordered Beauty to the closely related Bordered Beauty *Epione apiciaria*, “…. not uncommonly found, at all events in the south. As we go northward it grows scarcer ……..It resembles in form, size and colouring its close relative the Dark Bordered Beauty *E.parallelaria* (or, according to some writers *E. vespertaria).* This latter is less frequently met with……The broad bordering on the wing runs to a point at the apex of the wing, hence *apiciaria;* whilst in the other species this broad bordering does not die away, but remains parallel to the outer margin, hence *parallelaria”* (Hulme,1903).

In the early 1900s W.E. Kirby included both Bordered Beauty and Dark Bordered Beauty in his *Butterflies and Moths of the United Kingdom* and, although he states that the former is common throughout Great Britain, he comments that the Dark Bordered Beauty “….appears in July and August, and is widely distributed in Great Britain, but seldom common…..It feeds on aspen and birch” (Kirby, 1927).

The most specific records of sightings come from what was the 'Moth-er’s Bible' for many years, namely *The Moths of the British Isles* by Richard South, first published 1908 and subsequently revised and reprinted until 1977. South records, “Although odd specimens have been recorded from Norfolk, St.Ives (Hunts), Newbury (Berks) and Arundel (Sussex) the species is a northern one, occurring chiefly near York (Sandburn Moss)” (South, 1908).

It would seem from the comments of both Kirby and Hulme that some records of the Dark Bordered Beauty were from the southern part of the country in unstated locations. Were these solely the locations mentioned by Morris, i.e., in the New Forest area, or those also mentioned by South? Locally, however, Porritt seems very clear in his comments that until 1904 the Yorkshire site was the only English one known until the Northumberland sites were reported. We must realise, of course, that at the time these gentlemen were recording their Lepidoptera the transfer of information was not as easy as we find it today.

Notes on nomenclature

As can be seen from the above, the preferred binomial name for the Dark Bordered Beauty has varied over the years and, as F.E. Hulme has already commented, the specific names of *vespertaria* and *parallelaria* seem to be almost concurrent in 1903. Kirby and Hulme use the expected spelling relating to 'parallel' as a first choice and yet South and Meyrick use *vespertaria*. More modern authors, including Sutton and Beaumont in their 1989 *Butterflies and Moths of Yorkshire* and many others in the same era, use the standard *E. paralellaria* for the species.

A.Maitland Emmet (1991) states that it is "....a typographical error for *parallelaria, parallelus,* parallel: from the sub-terminal line". So it is that we have *E. vespertaria* (Linnaeus) in 1871, 1883, 1901 and 1907, then *E .paralellaria* Denis and Schiffermueller in 1984, 1989, 1997, reverting back to *E. vespertaria* by 2001 and seemingly retaining this present day name of *E. vespertaria* for the start of this 21st century. Considering the fact that the use of the binomial system was supposed to make clear which species was being referred to, we do seem to have had a long period of uncertainty. Is it finally solved?

Emmet does not give a comment on the derivation of *vespertaria*, perhaps it is related to 'vespers' and 'evensong', but states that the genus *Epione* is named after the wife of Homer's 'blameless physician', Aesculapius, and the mother of Machaon, the name now used as the specific for the Swallowtail butterfly. Such was the liking for using names of Greek gods and goddesses in lepidopteran nomenclature.

Strensall Common

The Common is some six miles north-east of York and straddles the road running between Strensall and Flaxton. It comprises about 600 hectares of damp heathland with patches of woodland cover, including areas of mature Silver Birch *Betula pendula*. A large portion of the Common is covered with Heather *Calluna vulgaris*, under-layered with many patches of Creeping Willow, the main food-plant of the Dark Bordered Beauty larvae on this site (see Plate II, centre pages). As previously mentioned, the Common is contiguous with both Stockton Common and the 'Sandburn' sites referred to by Morris and Porritt in their 19th century records and it can only be assumed that Strensall Common was contained within those wide descriptive areas.

Recording

A large portion of the Common is owned by the Ministry of Defence (MOD) and access is very limited, rightly so, as army exercises using live ammunition are carried out over a wide area. A small site on the northern boundary (<1ha.) is owned by the Yorkshire Wildlife Trust and it is this site upon which most of the pre-2000 records appear to have been taken. The remaining large heathland area is open to the general public and used for recreational, mainly dog-walking, purposes. Many dog-walkers use the tracks in the early mornings (before 08.00) completely oblivious to the beautiful moths fluttering around them, although some are now taking an interest after talking to an old man with a notepad and butterfly net.

From 2002 Butterfly Conservation held several annual workshops to establish where, and in what quantity, the Dark Bordered Beauty moths were established and during this period access was also gained onto the MOD area. The workshops were held in late July and early August as this was the then recognised flight time for the adult moths. However, during a larval search in 2004, flying adults were found in late June and further searches have since been undertaken starting several weeks earlier in the year. In 2004 mid-July produced the best results with 38 adults recorded.

A boost was given in 2005 when funds allowed a York University student to carry out further work on site, including larval searches, mapping of the Creeping Willow sites and other habitat characteristics. Two particular 'hotspots' were noted, both occurring in areas of high Creeping Willow density. During the flight period a 'mark, release and recapture' technique was used to study the movements of the moths and it was found that the average dispersal ability of the species was only 13 metres.

Based upon the location of the two above-mentioned 'hotspot' areas and the shortage of funds and personnel to carry out large-scale surveys, a transect was devised in 2007 and this, with a slight route modification after the first year, has been surveyed from late June into August twice weekly each year. The information in the two most popular identification books (Skinner, 1984 & 1998, Waring & Townsend, 2003 & 2009) suggested that the moths flew only for an hour or so after sunrise with activity declining quickly after this period and, therefore, surveys were commenced as soon as possible after sunrise. In 2007 the first adult was seen on 22 June with a peak count of 98 specimens on 16 July and the final sighting was made on 30 July. During this initial period only 2 females were positively identified, despite catching paler specimens for checking whenever possible.

The first sighting of 2008 was made on 9 July and flight activity peaked at 64 on 21 July but stragglers were still around on 11 August. The whole cycle had been almost 2 weeks later than in 2007. The early walk on 21 July turned out to be without a sighting and a second walk was made at 09:45, much later than usual. Surprisingly, this turned out to produce the peak count of the year and seemed to discount the long-held theory with regard to flight times. However, the second walk has not always been found to be the best on subsequent occasions and this does seem to be dependent upon temperature, light conditions and air movements.

When returning to the site in early April 2010, the hotspot area was found to have been consumed by a fire of unknown origin (T.J.Crawford pers.comm.). A large area of the heath had been damaged and no further information has been found to establish the cause, or even the date, of the fire. This factor caused a dramatic reduction in the numbers of moths seen over the two years 2010 and 2011, peak counts dropping to 35 and 18 respectively. A close inspection of the burnt areas during early 2011 showed that a substantial amount of Creeping Willow regeneration has taken place and may well be suitable for re-colonisation in the near future. During the season of 2011 an attempt at 'assembling' was carried out in which a female, confined within a linen bag, was used to attempt to attract males for mating purposes. This attempt was, unfortunately, unsuccessful. It seems that the females are extremely sedentary and may not move far, if at all, from their place of emergence and therefore the colonies remain very closely tied. However, it is hoped to be able to transfer some larvae onto the re-growth within the affected area in the near future.

Conclusions

It is difficult to form really firm conclusions from surveys which have been carried out over such a short period and with such short visits and it has become obvious to me that much more time and energy is necessary to do justice to the subject. However, considering that a large portion of one well-known professional lepidopterist's lifetime was spent studying industrial melanism, mainly with the Peppered Moth *Biston betularia* and with arguable, even disputable, results perhaps, as a mere amateur, I may make the odd comment.

The males are certainly flying earlier in the year than originally thought, i.e., late June, and the flight period is over by early August. The peak flight period in four of the five years was between 10 July and 16 July, with 2008 being the exception when the whole flight pattern started and ended over a week later. Daily flight activity is extended under certain conditions and free-flying has been recorded well into the late mornings. But what parameters govern these flight times?

Although the food plant grows in many areas of the Common it appears that the sedentary habit of the females precludes expansion throughout the area. This raises concerns about natural re-colonisation of the fire-damaged areas. Will the females move away from their point of emergence?
Fires, and re-growth of the willow, must surely have occurred during the past hundred and forty years since Porritt and Morris recorded the species on site, but we do not know how widespread and abundant the moths were at the time. What did they both mean by 'abundant'?

The one firm conclusion I will make is that more concerted effort is necessary to gain more knowledge of the Dark Bordered Beauty and its habitat in order to help in its conservation, but in these days of austerity and seeming lack of interest by much of the younger generation, will this be available? It would be inexcusable if we allowed this beautiful little insect to become extinct in Yorkshire, indeed in England.

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Letter to the Editors

Red Grouse on Longstone Moor

I have a small amendment to Derek Yalden's paper on Red Grouse in the Peak District (*The Naturalist* 2011 No.1078). I am pleased to report that Red Grouse are still present on Longstone Moor, Derbyshire SK1973. I live nearby and have seen them regularly during the past seven years. My highest count for 2011 was 11 birds and today (3 February 2012) I counted 10, all in pairs. These observations support Yalden's conclusion of a modest increase in peripheral moorland areas.

Derek Whiteley, Beech Cottage, Wardlow, Derbyshire

On the recent appearance of the Black-bellied Angler in the central North Sea

D.E. Whittaker, Scarborough

Introduction

Fishes of the family *Lophidae* are popularly known as anglerfish or monkfish and two species, *Lophius piscatorius* and *Lophius budegassa*, are known from the eastern North Atlantic.

Lophius species laid in the fish pound of a working trawler or research vessel appear indistinguishable and identification between the two species on external characters alone requires careful scrutiny. Distinguishing characters are detailed by Wheeler (1974) and Caruso (1986), of which the number of humeral spines in conjunction with the number of fin rays in the fleshy second dorsal, are the most reliable if fish are required to be returned alive without dissection. Differences only become immediately apparent when the fish are gutted, the peritoneal lining of *L. piscatorius* being white, that of *L. budegassa* jet black.

Of the two species *L. budegassa* (see Plate V, centre pages) has the more southerly distribution and, having been overlooked by British naturalists, was not known to be present in British waters until the early 1970s; therefore it was not included in the latest treatise of the British fish fauna prior to that time (Wheeler, 1969) and its northern limit was believed to be about the Bay of Biscay (Monad and Le Danois, 1973).

The capture of a suspected specimen on Labadie Bank in 1971 led to an examination of *Lophius* material preserved in the British Museum and revealed the existence of specimens of *L. budegassa* from British waters, misidentified as *L. piscatorius*, and including a specimen from as far north as Oban captured in 1878. (Wheeler *et al.*, 1974). The discovery that *L. budegassa* had been overlooked in British waters necessitated the inclusion of the fish in the new identification guide by Wheeler (1978), although the true extent of the distribution of the fish in British waters was still unknown and there was no evidence that the fish was present in the North Sea.

Data on its occurrence off the south-west of Ireland was further detailed by Fitzmaurice (1976) and off Northern Ireland by Crozier (1985), who found that the fish was not, however, present in the northern Irish Sea. A summary of *Lophius* identification by Caruso (1986) indicated a distribution of *L. budegassa* around the British Isles extending to the Shetland Isles but included an unconfirmed distribution throughout the entire North Sea basin; however, a revision of Wheeler's guide by Maitland and Herdson (2009) maintained the western distribution shown in the original work.

A small number of Scarborough fishermen became familiar with *L. budegassa* in 1982 when four local trawlers began fishing Shetland waters for a brief period during that year, landing their catches at Peterhead. A northern catch by one of these vessels was subsequently landed at Scarborough and included scores of boxes of this species; no *L. piscatorius* were present, indicating the abundance of *L. budegassa* around Shetland at that time.

Method of fish collection

a) Yorkshire marine fish/invertebrate survey 1967-2012

To supplement marine biodiversity data being collected from the shore, an ongoing survey of the marine fishes and invertebrates occurring off the Yorkshire coast was initiated by the author in 1967 by requesting all skippers and crews of the Scarborough commercial fishing fleet to retain, every day, anything brought up in the nets that they perceived to be infrequently seen, unusual, unknown to them, or otherwise of interest. Collection of the material is undertaken as each vessel returns to port. In addition, the fish landings laid out in the market are monitored daily to ensure nothing of interest has by-passed the scheme.

b) Fishing effort and survey area

The survey commenced when expansion in the Yorkshire fishing fleets was beginning. Fishing effort during the first year of the survey, 1967/68, was estimated at 38,100 hours trawling effort expended by 14 vessels, most of which worked within 25 miles of Scarborough but with a smaller number working to 40 or 50 miles radius. By 1970, the fleet had expanded two-fold and by 1983 the fleet consisted of 35 vessels with a corresponding increase of fishing effort and with many vessels regularly working out to 150 miles of the port.

Coverage of the fishing grounds was thus intense, ensuring that biological samples were returned from across the entire area.

Survey results of *Lophius budegassa* occurrences

There are a number of interesting features of the accumulating records of *L. budegassa* in Yorkshire waters. Of primary note is that there were no occurrences during the first 25 years of the survey, the first capture being noted in 1993. From 1993 - 2011, there have been 35 occurrences of the fish and during this period there was a number of years when no fish were seen, including 2008. Since then there has been a marked and significant increase in the numbers of fish being caught with 23 captures being taken during the three years of 2009-2011 (Table 1).

No captures have been made from deeper, off-shore grounds, all the returns being of solitary fish caught close inshore, frequently within a mile of the shore out to three miles off the coast, with the only multiple capture being of two fish trawled by the 'Provider' in June 2011.

Due to gutting, many of the fish cannot be sexed or their maturity stage estimated, but those fish with gonads present have all been maturing fish; no mature fish have so far been caught. Total lengths of the fish have ranged from 336mm to 665mm.

The data also suggest a seasonal movement of the fish in and out of Yorkshire coastal waters, with the greatest numbers occurring in June/July and numbers falling away during the autumn/winter period (Fig. 1).

Table 1. Occurrence of *Lophius budegassa* from the central North Sea

Date of capture	Position caught (Scarborough grounds)	Standard length (to caudal peduncle), mm	Total length (tip of caudal fin), mm	Weight kg	Sex
1993					
August 17	close inshore,	-	-	-	-
1997					
April 8	close inshore,	-	-	3.52	-
May 7	close inshore,		570	-	-
July 24	close inshore,	-	-	-	-
1998					
June 16	11 miles off Scarborough	-	-	-	-
September 15	5 miles off Scarborough	-	-	-	-
2002					
February 12	close inshore,	-	640	3.2	-
May 22	6 miles off Filey	-	570	-	-
June 22	close inshore,	-	620	2.5	-
2003					
July 21	close inshore,	-	665	3.5	female
October 26	close inshore,	-	-	-	-
2007					
April 16	close inshore,	-	553	-	-
2009					
June 19	close inshore	-	456	1.1	female
July 2	close inshore	-	573	1.7	-
July 7	close inshore	436	545	1.8	-
July 27	close inshore	300	365	0.66	-
September 23	close inshore	-	458	1.42	-
2010					
April 23	close inshore	-	422	0.85	-
May 1	4 miles off Scarborough	-	-	-	-
June 4	close inshore	-	585	2.65	-
June 17	Scarborough grounds	-	-	-	-
July 20	close inshore	297	365	0.69	female
July 21	close inshore	342	433	0.91	-
September 2	close inshore	277	336	0.558	female
2011					
May 16	close inshore	323	402	0.74	-
May 24	close inshore	283	344	0.61	male
June 9	close inshore	423	520	-	male
June 16	close inshore	-	-	-	male
June 16	close inshore	-	-	-	female
July 4	close inshore	370	450	-	female
August 5	inshore off Hartlepool	387	492	1.49	male
August 18	inshore off Whitby	323	397	0.86	female
October 6	close inshore	376	455	-	male
November 2	close inshore	320	387	0.78	male
November 18	1 mile off Flamborough	442	536	2.08	-

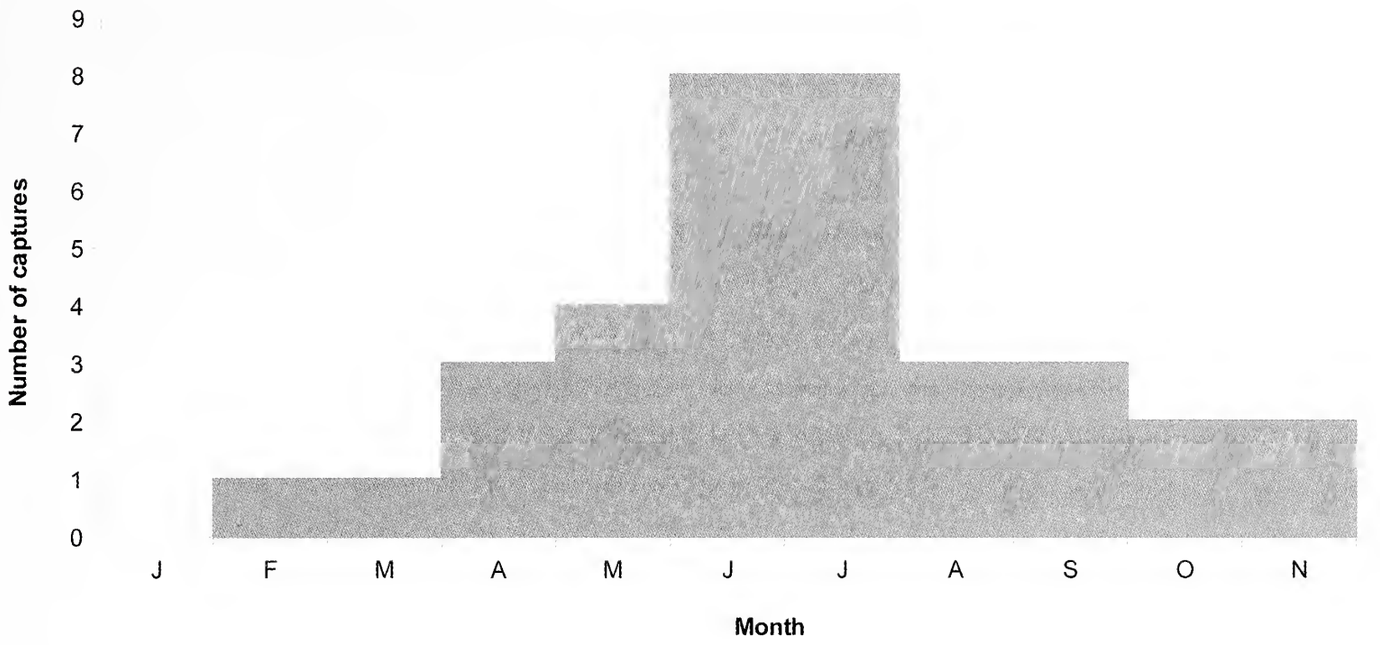

Figure 1. Number and seasonal frequency (totals for each month) of *Lophius budegassa* off the Yorkshire coast 1993-2011.

Discussion

In view of the intensity of the survey recording effort and the high level of returns from the Scarborough fishing fleet, together with the constant trawling of an extensive sea area during fishing operations, extending from a mile to more than 100 miles offshore, and the daily monitoring of the fish market landings, it can be stated with confidence that *L. budegassa* was not present in the central North Sea area before the early 1990s and that its occurrence there appears to be as a result of very recent and apparently increasing immigration of the species into the North Sea basin.

Possible mechanisms for the appearance of the fish in Yorkshire waters may include the long distance displacement of the fish from north of 58° latitude or the successful survival of pelagic post-larval fish from the same area, transported south into the Yorkshire sea area by the south-going current streaming along the British eastern seaboard. A probable mode of migration is by selective tidal stream transport, known to be used by many fishes (Weihs, 1978) and used, for example, by Plaice *Pleuronectes platessa* in the southern North Sea (Harden Jones *et al.,* 1979). This has been suggested, by Hislop *et al.* (2000), as a likely explanation for the otherwise inexplicable captures of non-juvenile *Lophius* in plankton nets close to the surface, sometimes above extreme depths. Whatever the mechanism of their movement, the appearance of *L. budegassa* in the central North Sea constitutes a recent extension of its distribution and a biological change in the fauna of the central North Sea.

The morphology of *Lophius* and its apparently sedentary life on the sea floor to await its prey, do not suggest a fish capable of long distance migration (Wheeler 1969) and comparatively little was known about monkfish movements until recent years. Recent tagging investigations by Landa *et al.* (2001 and 2008) off the Iberian peninsula and the south-western approaches suggest seasonal movement of the fish in- and off-shore, with the largest displacement of an individual of *L. budegassa* of 408km within one month of release..

The first British *Lophius* tagging experiments of Laurenson *et al.* (2005) around the Shetland Isles are of particular interest in relation to the Yorkshire captures and have also demonstrated that *Lophius* is capable of extensive movement. Although 35% of tagged individuals of *L. piscatorius* were recaptured less than 25km from their release positions, the results suggested an offshore migration towards deeper water near the continental shelf during the autumn and winter. The greatest displacement was of 876km but several had travelled up to 100km and another fish 320km. These authors suggest that a probable mechanism of transport to cover such distances is by selective tidal stream transport. The results of these tagging experiments suggest that a displacement of fish from the northern North Sea, south to the Yorkshire coast, would not be of exceptionally great or unusual magnitude for *Lophius*.

L. budegassa may be regarded as a recent immigrant to the Yorkshire coast and central North Sea, whose occurrence, since the first record of 1993, has been as a rare vagrant. However, the greater number of occurrences in the three years 2009-2011 is of particular interest and of significance and, given that fishing effort has been unchanged, is possibly a reflection of other biological events taking place in the area.

Attention has already been drawn to some of the exceptional events taking place off the Yorkshire coast during this period (Whittaker, 2011), including the increased occurrence of *Brama* and *Sarda* and the particularly rare occurrence of a *Dermochelys* and *Naucrates* . Also of particular note during this period has been the occurrence in the area of numbers of the oceanic squid *Illex coindeti*, which has seldom been recorded in the North Sea and is of extremely rare occurrence on the Yorkshire coast (Whittaker, unpublished data).

Squids are useful indicators of particular water masses and the appearance of oceanic species outside their normal range may indicate periods of greater influx of Atlantic water into the central North Sea, and perhaps increased current velocity. Such factors would also greatly assist or enhance displacement of *Lophius* to the Yorkshire coast.

Acknowledgements
I am indebted to the many skippers and crews of the Scarborough fleet for their participation in the survey extending over so many years and for their continued support in returning information and biological samples from the Yorkshire fishing grounds.

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Composition of social groups of Long-finned Pilot Whales which stranded on the Holderness and Lincolnshire coasts in 1982 and 1985

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Introduction

Long-finned Pilot Whales *Globicephala melas* occur across the sub-polar and temperate regions of the southern oceans and the north Atlantic. In the north-eastern Atlantic few extend north of Iceland (66° N), their core range being the deep waters (200-3,000m) along or to the west of the 500m contour along the edge of the continental shelf. A main northerly concentration is to the west of the Faroe Islands but further south they occur in the Bay of Biscay, off the Iberian Peninsula and into the Mediterranean (Reid *et al.,* 2003).

This squid-eating specialist is one of the largest of the dolphin species, with females reaching 5.5m and males reaching 6.3m in length. It characteristically occurs in compact groups of 20 to 40, sometimes aggregating, possibly during mating/breeding periods, into herds of hundreds or low thousands (Boran *et al.*, 2008). Stranding events are frequent, with many members of a herd coming ashore at one time. One of the largest recorded strandings was on the Lofoten Islands, off Western Norway, where over 1000 individuals came ashore (Watson, 1981).

For centuries its predisposition for mass stranding has been exploited by the inhabitants of North Atlantic islands, locally on the Faroe Islands, who have taken advantage of their ability to herd whales into bays where large numbers were beached and killed. The tight social cohesion of pilot whale herds is likely to be an important factor in explaining the species' tendency to mass-strand, even without human intervention, and often to re-strand when part of a beached group has been re-floated by man (Martin *et al.,* 1987).

Historical background and Yorkshire and Lincolnshire records

Long-finned Pilot Whales occur around the southern, western and northern coasts of Britain with concentrations in the south-west and off the north of Scotland (Boran *et al*., 2008). Although not regularly entering the North Sea or penetrating as far south as the Tyne or Humber sea areas, there have been occasional sightings in Yorkshire and Lincolnshire waters.

A large school was in the Spurn area in June 1862 with an unspecified number stranding to the south of the Humber mouth on the sandbanks at Cleethorpes (TA30). Others of this population entered the Humber estuary where 41 stranded on Whitton Sands (SE8825) (Morfitt, 1899; Limbert, 1985; Howes, 2000). The next reported stranding, just over a hundred years later, was at Whitby (NZ81) on 21 February 1964. A 4.57m specimen stranded dead on 26 November 1989 at Low Skirlington (TA1953) and a 6.1m male stranded alive on the beach at Redcar (NZ52) on 21 May 1991 (Howes & Phillips, 1993). Sightings have also been claimed with a school of 10 reported off Spurn (TA41) on 11 April 1962 and a further specimen off Scarborough (TA0589) in August 1967 (Delany, 1985).

The substance of this study is based on an interpretation of the following two major stranding events on the Yorkshire and Lincolnshire coastlines reported partly in Martin *et al*. (1987) and Sheldrick (1989).

A total of 23-25 animals became stranded in and around the Wash, Lincolnshire, between 29 October and 4 November 1982. Although some of those which were re-floated evidently managed to return to sea, 13 are known to have fatally stranded. These were eight at Bennington, Boston (TF44) in the Wash on 29 October, three at the Haven, at the mouth of the river Witham, Boston (TF33) also on 29 October, and one each at Butlin's Skegness Holiday Camp (TF56) and at Gibraltar Point (TF55), Skegness, on 4 November 1982. The sexes of seven of these and total length measurements of eight were recorded in Sheldrick (1989) but not in Martin *et al*. (1987).

On 5 January 1985 a single Long-finned Pilot Whale stranded on the beach at Mablethorpe, Lincolnshire (TF58) (Sheldrick, 1989). This was followed at about midday on 15 January by a large group grounding in shallow water at Dimlington High Land off the village of Out Newton (TA3921). By 16 January a mass stranding involving 33 to 36 specimens was distributed along the Holderness coast between the Runnels, Holmpton (TA3624) and Easington Gas terminal (TA4019) (Bellamy, 1985). The veterinary surgeon Simon Rowell, accompanied by Inspector D. Beardsley of the RSPCA, euthanized seven specimens by lethal injection using the barbiturate pentobarbitone, the rest were already dead (Rowell, 1985). On 18 January two were seen dead offshore, on 21 January one stranded alive on the south side of the Humber mouth at Donna Nook (TA4399) and finally one was found dead on Spurn peninsula (TA41) on 29 January (Delany, 1985, Waters; 1985; Rowell, 1985; Sheldrick, 1989; Howes, 2000). The claimed number of whales has varied in different reports due, no doubt, to corpses being washed back out to sea and being re-deposited at sites further south. In describing the final disposal of the whale corpses, Bellamy (1985) noted a

specimen removed on 22 January from near Northgate, Withernsea (TA3828). Being much the most northerly location, this would seem to be an additional specimen.

Measurements and samples
A team from the Cambridge University Sea Mammal Research Unit measured and collected tissue and organ samples from the 1985 Holderness mass stranding (Waters, 1985). The length measurements were taken in a straight line parallel to the long axis from the most anterior part of the head to the apex of the tail notch. A lower mandible was removed to provide two teeth for ageing purposes. These were sectioned longitudinally and, after etching with acid, growth lines in the dentine were counted as a guide to ageing. The blubber thickness of most animals was recorded. Reproductive organs were taken from all females and most males. The development of male testes was used as an indication of sexual maturity. From the ovaries it was possible to monitor the onset and number of ovulations and number of pregnancies.

With Sheldrick (1989) providing the recorded lengths and sexes of individuals from both the 1982 Wash area strandings and the 1985 Holderness and Humber mouth strandings, and with Martin *et al.* (1987) providing analyses of the length ranges of male and female Long-finned Pilot Whales at various stages of development from birth, through adolescence, to sexual maturity and full adulthood, these studies have provided the opportunity to interpret the age range and social class structure of these Yorkshire and Lincolnshire groups.

Results and Discussion:
The 1982 Wash stranding The small sample for which sex designations and lengths were obtained from this cohort, provides only limited evidence of population structure of this social group. Figure 1 indicates that two calves, two adolescent females, three sub-adult males and one mature female were sampled.

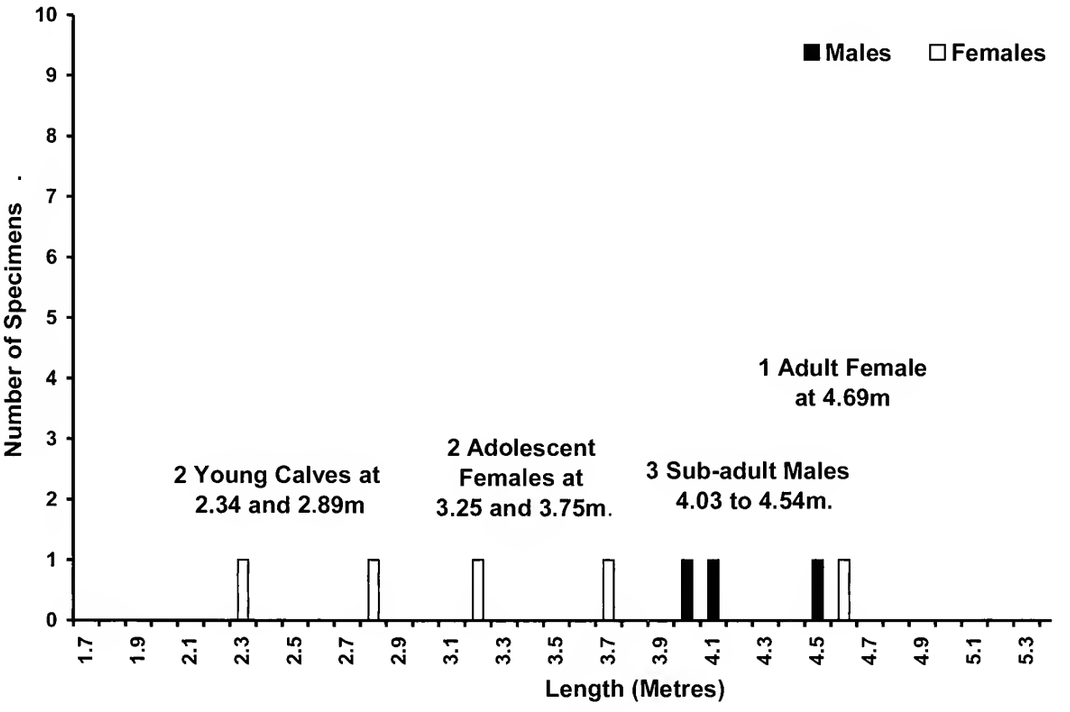

Figure 1: Length ranges and estimations of social categories of 8 from at least 23 Long-finned Pilot Whales that stranded in the Wash area of Lincolnshire in October and November 1982.

The 1985 Holderness/Humber mouth stranding Sheldrick (1989) showed that of sampled specimens 14 were male and 19 (58%) were female. With calves being born at 175 to 178cm in length (Boran *et al.*, 2008) and with Martin *et al.* (1987) reporting a body length of 2.5m being achieved at one year, the smallest individual in this group, a female at 2.19m, would seem to be a young calf in its first year. Other calves, presumably in their second year, were a 2.86m male and a 2.87m female. With males becoming sexually mature at about 5m in length (Martin *et al.* 1987), the group was judged to contain 6 juvenile and adolescent males ranging from 3.30 to 4.85m. There were 7 adult males ranging in length from 5.40 to 5.80m, making up 21.2% of this social group. With females becoming sexually mature at between 3 to 4m in length and at about seven years of age (Martin *et al.*, 1987), the group evidently contained 4 adolescent females of 3.48 to 3.80m. The largest sex/age category consisted of 13 adult females ranging from 4.10 to 4.70m, making up 39.4% of the social group. Of these five were pregnant and three lactating (Waters, 1985). Two of the pregnant females were judged to be 20 years of age (Martin *et al.*, 1987). This composition is summarised in Figure 2 and seems to be typical of the species according to Martin *et al.* (1987).

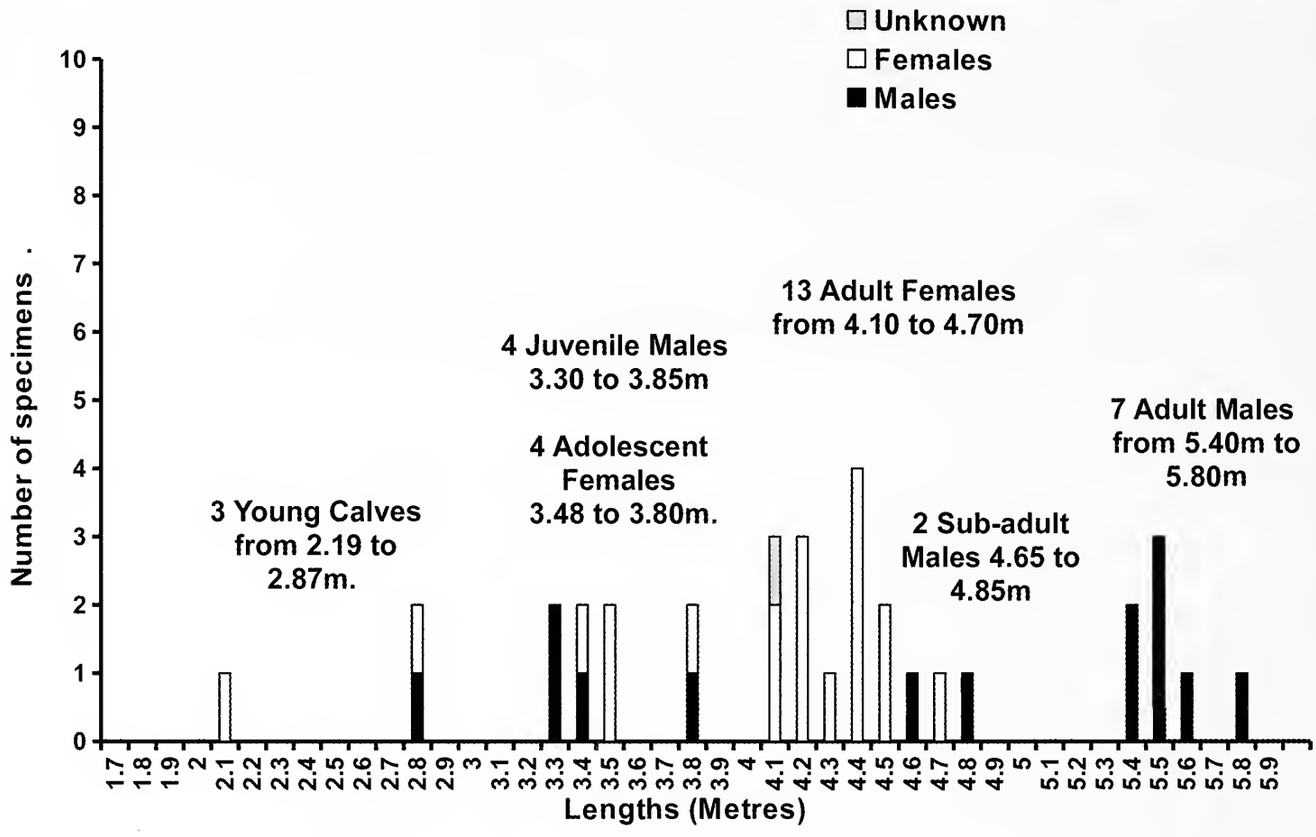

Figure 2: Length ranges and estimations of social categories of 34 Long-finned Pilot Whales that stranded on the Holderness and Humber mouth coasts in January 1985.

General Notes

Reproductive synchrony The limited numbers of foetuses collected from British mass strandings have provided little evidence of reproductive synchrony, though three foetuses from the Holderness stranding were judged to have been conceived within a few days of each other, suggesting some synchrony of ovulation within a single social group (Martin *et al.*, 1987).

Development and social function of males Using data from four British mass strandings (including the 1985 Holderness event) Martin *et al.* (1987) showed that testis weight varied between 0.04 and 5kg. Males below 4.25m in length had a testis weight of substantially less than 1kg and were deemed to be sexually immature. For those whales of about 5m in length, testis weights increased rapidly and were probably near to sexual maturity. Males of between 4.25 and 5m corresponded with ages from 9 to 14 years of age. For those between 5 and 6m in body length, testis weight developed to a maximum of 5kg. These animals were deemed to be sexually mature. This indicated that out of 45 sampled males in the four strandings 42% were immature, 18% were pubertal or immature and 40% were mature or approaching maturity.

With the sampled social groups having a higher proportion of females (c.57% Wash stranding, 58% Holderness stranding) and with the analysis of five British mass strandings (Martin *et al.*, 1987) averaging at c.60% female, there is a suggestion of higher mortality rates for males than females. One possible explanation of this is that males may serve a defensive role for the herd, indeed adult males have been witnessed positioning themselves between a vessel approaching a herd containing females with young (Boran *et al.*, 2008).

Injuries
Most of the Holderness specimens exhibited external injuries such as deep cuts and grazes, especially on the fins, sustained as a result of coming ashore on an abrasive pebble-strewn beach. One had frothy blood in its mouth, suggesting a ruptured blood vessel in its lungs (Rowell, 1985). Tooth scars were common on adult males and were thought to be caused during play or fighting with conspecific males, perhaps during competition for dominance in the herd. Squid sucker marks were around the mouth and head, presumably resulting from the attempts of prey to avoid being eaten (Martin *et al.*, 1987).

Blubber thickness
Most adults carried blubber 35 to 65mm in thickness over the body; on average, blubber depth was found to increase by about 6mm with each metre of body length (Martin *et al.,* 1987).

Disposal of Holderness stranded whales
On 18 and 19 January 1985 Simon Rowell returned to observe East Yorkshire County Council workers removing the carcasses. A caterpillar tractor drew carcasses along the beach to strategic sites at the foot of the sea cliff to where an EYCC lorry with a winch lifted them to the cliff top. Here a large mobile crane loaded them into four skips for transportation to the landfill site at Burstwick in the interests of public health and to avoid public complaint. This is a far cry from the 19th century when, in the interests of public education, large stranded whales such as the Blue Whale from Spurn in 1835 and the Sei Whale from Goole Docks in 1884 were skeletonised and articulated for exhibition in Hull Museum and the Natural History Museum respectively.

Acknowledgements
Particular thanks are due to Gill and Douglas Mansion who, via Professor Mark Seaward, supplied the copy of Sheldrick (1989) which effectively triggered this study. Thanks are also due to Howard Frost who supplied contemporary press cuttings and the copy of *Holderness Countryside* magazine containing three excellent contemporary articles on the 1985 mass stranding.

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Historical notes on the Yorkshire Naturalists' Union's first Marine Biology Committee

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The Victorian and Edwardian boom in seaside spas and holiday resorts, made possible by the expanding railway networks, led to a near mania for marine biology. This was encouraged by the popularising and technically excellent writings of Philip Henry Gosse between 1853 and 1865, Charles Kingsley, of *Water Babies* fame, in 1855 and our very own Margaret Gatty of Ecclesfield in 1872. This, linked with the 19th century enthusiasm for microscopy, set the scene for the Yorkshire Naturalists' Union to appoint a Committee "… *to promote investigations into the Marine Zoology of the Yorkshire Coast"* at its Annual General Meeting in Dewsbury on 14 March 1887. Headed by the dazzlingly brilliant figure of Henry Clifton Sorby JP, LLD, FRS of Sheffield (the Jacques Cousteau and scientific polymath of his generation) and with William Eagle Clarke MA, MBOU (Curator of Leeds Museum) as Secretary, the Committee attracted some illustrious members (*Naturalist* 12 (1887): 143-147). Although focussed on marine zoology, the sea-weed element of the equation was

championed by the high profile involvement of George Massee FRMS, doyen of algology at Kew.

Though periodically admonished by the YNU Executive for apparent inactivity, Committee members produced an impressive (if *ad hoc*) output of papers, field meeting reports and records published in *The Naturalist* from the 1880s through to the late 1930s. Records generated up to 1907 contributed to the relevant taxonomic reviews in volume 1 of the *Victoria History of the Counties of England: Yorkshire* (Page, 1907), including Borley (1907) and Baker (1907). These and later records contributed to the relevant sections in the two volumes of *The Natural History of the Scarborough District* (Walsh & Rimington, 1953 & 1956).

Sectional members included such familiar names in the contemporary literature as D.W. Bevan (Scarborough), A.J. Burnley (Scarborough), J.D. Butterell (Wansford), William Eagle Clarke (Leeds and Edinburgh), W.J. Clarke (Scarborough), J. Percy A. Davis (Halifax), Oxley Grabham (York), Prof. Walter Garstang (Leeds), J.A. Hargreaves (Scarborough), Rev. W.C. Hey MA (York), J. Irving (Scarborough), George Massee (Kew), Mrs E.M. Morehouse (Doncaster), Thomas H. Nelson (Redcar), Dorothy Perkins (Scarborough), S. Lister Petty (Ulverston), William Denison Roebuck (Leeds), J.T. Stevenson (Scarborough), Arnold T. Watson (Sheffield) and Rev. F.H. Woods (Bainton).

In 1943 the renowned marine biologist Professor Sir Alister C. Hardy FRS served as YNU President, his presidential address entitled *Plankton Ecology in the Service of Man* (*Naturalist* 68 (1943): 1-9). Although the section had not provided an annual report as such for many years, its demise was signalled by the deaths of its last secretary, W. J. Clarke, in 1945 (*Naturalist* 71 (1946): 19-20) and its last chairman, Professor Walter Garstang in 1949 (*Naturalist* 74 (1949): 49-50).

From the 1950s onwards, marine molluscs, fish, birds and mammals have been separately recorded by the relevant specialist sections. However, in response to an upsurge of interest in studying the full breadth of Yorkshire's marine and coastal ecology and its associated conservation implications, the section has been re-launched by a particularly active, highly motivated, knowledgeable and enterprising group led by Adrian Norris (Co-ordinator) and Paula Lightfoot (Recorder). The 2011 season has witnessed an impressively active programme of public events and recording projects, much of it reported in words and images on the YNU website.

As a background against which new records can be compared, a preliminary search for published studies or reports on the marine biology of the Yorkshire region has produced some 470 references dating from 1881 to 2010. A chronological bibliography of these has been placed on the YNU website and will hopefully form the basis of future research and provide records for a Yorkshire marine biology database. Figure 1, based on the numbers of published items per consecutive five year period, shows interesting trends in published output. Predictably, a prolific period of activity from 1885 to 1930 coincides with the heyday of the YNU Marine Zoology Committee. Dips in activity coincided with the two world wars when most people were on war service, the fishing industry was severely limited and civilian access to ports and harbours was prohibited.

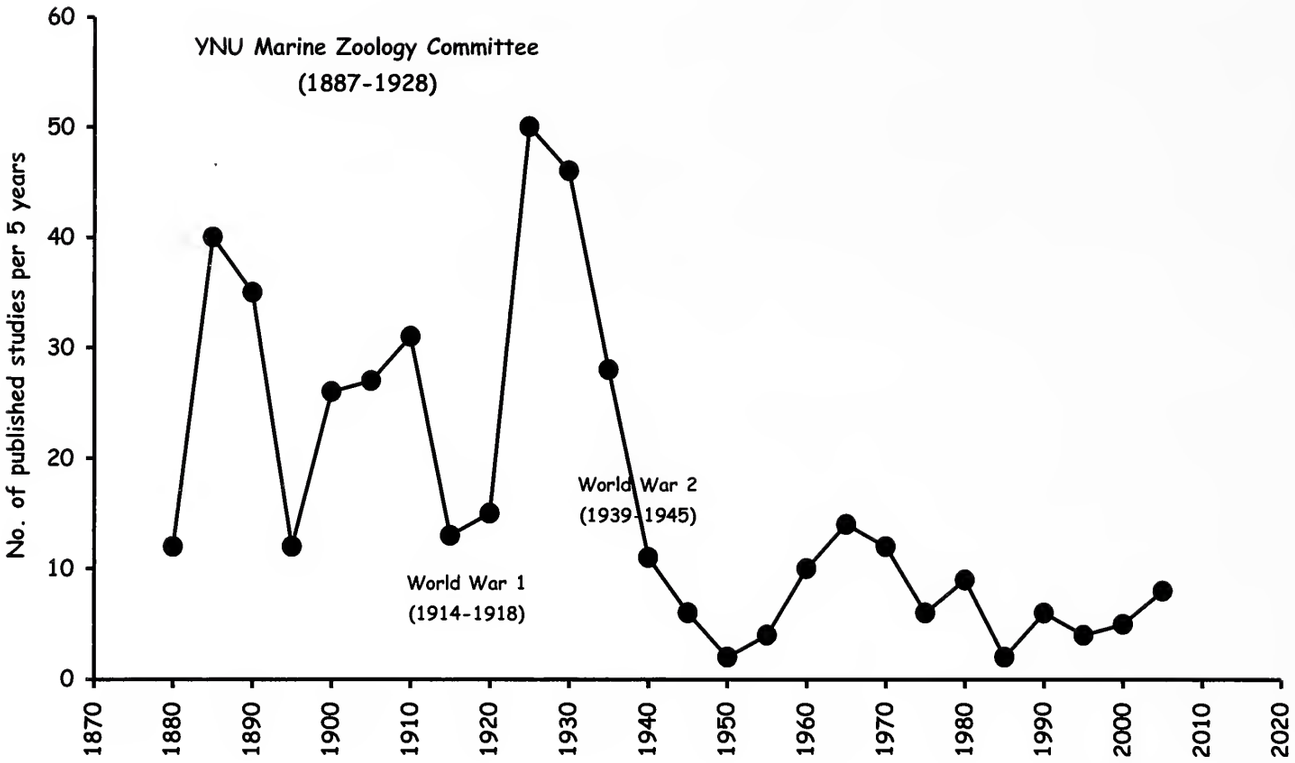

Figure 1: Trends in the output of published studies and reports on Yorkshire's marine biology.

The bibliography quickly reveals that the most prolific workers were W.J. Clarke with 82 notes and papers between 1910-1944, Thomas Sheppard with 32 (1902-1940), Thomas Stephenson with 21 (1886-1907), W.D. Roebuck with 17 (1882-1898), Rev. F.H. Woods with 16 (1901-1915), W.C. Hey with 12 (1884-1903), J.A. Stevenson with 12 (1926-1932) and in more recent times C.I. Massey with 9 (1972-2003) and A. Norris with 8 (1973-2006).

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Quill mites of the family Syringophilidae parasitic on birds in Yorkshire

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Introduction

Birds can carry both feather mites and quill mites on their bodies. Feather mites are in general to be found externally on the feathers. Their location varies with the genus and species of bird and are found on the flight feathers and coverts, the tail feathers and amongst the contour feathers of the body (Nattress, 1995, 2006). Quill mites (or syringophilid mites) on the other hand, are to be found within the quill (or calamus) of the feather. Most genera of quill mites are to be found in the flight feathers and coverts and in the tail feathers. Mites of the genus *Picobia,* however, are found only in contour feathers. Quill mites spend their entire lives within the calamus except when a gravid female migrates to a new feather which she enters either through the superior umbilicus or through a hole which she opens in the quill wall. (The superior umbilicus is open only in the developing feather, it closes when the feather development is complete).

Syringophilid mites are monoxenous (with a single host) or oligoxenous (with several related hosts) parasites living and reproducing within the quills of the feathers. They feed on the fluids of the soft tissue of their hosts by piercing the quill wall with their styletiform chelicerae (Kethley, 1971; Casto, 1974).

In Kethley's revision of the Syringophilidae, he refers only to two species of quill mite recorded in England (Kethley, 1970). These are *Syringophilopsis fringilla* from the type host, the Chaffinch *Fringilla coelebs,* and *Syringophiloidus minor* from the type host, the House Sparrow *Passer domesticus*. The micro-slides of both species which, by inference, were deposited in the Natural History Museum, London, have been lost (Dr Anne Baker, NH Museum pers. comm.).

So far as I can ascertain, there are no previous Yorkshire records.

Material and Methods

The mite material used in the present study was collected from dead birds provided by friends, ornithologists and local naturalists. Mites were mounted on micro-slides in a polyvinyl lactoglycerol medium and examined with phase contrast using a Zeiss Photomicroscope II. The scientific names of the birds follow Howard and Moore (1980).

Results

Family Syringophilidae Lavoipierre, 1953

Subfamily Syringophilinae Lavoipierre, 1953

***Syringophiloidus klimovi* Skoracki & Bochkov, 2010**

First described from a Greenfinch *Carduelis chloris* from Kazakhstan. It has now been recorded in West Yorkshire.

Material examined: 4 females from quills (primaries and primary coverts) of a Greenfinch; Scarcoft, near Leeds (SE3541).

***Syringophiloidus minor* Berlese, 1887**

This species is known from four hosts: House Sparrow (type host) from Europe, Russia and North America, Tree Sparrow *Passer montanus* from Russia, Redwing *Turdus iliacus* from Russia and Starling *Sturnus vulgaris* from France.

Material examined: 3 females from quills (secondaries and greater coverts) of a House Sparrow from West Ardsley, near Leeds (SE2724).

***Syringophilopsis fringilla* (Fritsch, 1958)**

This species was originally described from a Chaffinch from Germany (Fritch, 1958). It has now been recorded from the same host in West Yorkshire.

Material examined: 3 females from the quills (secondaries) of a Chaffinch from Bradley, near Keighley (SE0048) and 7 males, 11 females, 3 nymphs and 4 larvae from the quills (primaries) of a Chaffinch, Morley (SE2563).

***Syringophilopsis kirgizorum* Bochov, Mironov & Kravtsova, 2000**

This species was first described from a Greenfinch from Kirghizia (Bochov, A.V. *et al.*, 2000) and has since been recorded on Goldfinch *Carduelis carduelis*, Linnet *Carduelis cannabinis* and Desert Finch *Rhodospiza obsoleta*. It has now been recorded from a Greenfinch in West Yorkshire.

Unusually, this species was also recorded on the Tawny Owl *Strix aluco*. This must have been the result of horizontal transmission when the mites moved from prey to predator.

Material examined: 3 females from quills (primaries and primary coverts) of a Greenfinch, Scarcroft, near Leeds, (SE3541) and two females from the greater coverts of a Tawny Owl from Worsbrough, South Yorkshire (SE3403) (Nattress, 2011).

***Syringophilopsis hirundus* Skoracki, 2004**

This species was first described from the Swallow *Hirundo rustica* L., 1758 from Poland (Skoracki, 2004). It has now been recorded from the same host in North Yorkshire.

Material examined: 4 females and 3 nymphs from quills (secondaries) of a Swallow; Bilton in Ainsty (SE4749).

***Aulobia cardueli* Skoracki, Hendricks & Spicer, 2010**

This species was first described from the Dark-backed Greenfinch *Carduelis psaltria*. It has also been recorded from Goldfinch, Citril Finch *C. citronella* , Redpoll *C. flamea*, Twite *C. flavirostris* and Siskin *C. spinus*. It has now been recorded from a Goldfinch in West Yorkshire.

Material examined: 2 females, 1 tritonymph and 2 larvae from the quills (primaries) of a Goldfinch from Morley, Leeds (SE2563).

***Neosyringophilopsis troglodytis* (Fritsch, 1958)**

This species was originally described from the Wren *Troglodytes troglodytes* from Germany and Poland (Fritsch, 1958; Skoracki, 2004) and recorded from the House Wren *T. aedon* from Canada (Bochkov & Galloway, 2001). It has now been recorded in West Yorkshire.

Material examined: 2 females and 1 nymph from quills (secondaries) of a Wren; Bradley, near Keighley (SE0048).

***Neosyringophilopsis aegithali* (Bochov, Mironov and Skoracki, 2001)**

This species was first described from the Long-tailed Tit *Aegithalos caudatus* from Russia. It has now been recorded in West Yorkshire.

Material examined: 3 females from quills (secondaries) of a Long-tailed Tit; near Bramhope, .

***Torotrogla cardueli* Bochkov and Mironov, 1999**

This species was originally described from the Siskin *Carduelis spinus* from Russia (Bochkov & Mironov, 1999). It has now been recorded from the same host in West Yorkshire.

Material examined: 7 females, 2 protonymphs and 1 larva from quills (secondaries) of a Siskin from Sherburn in Elmet (SE4633).

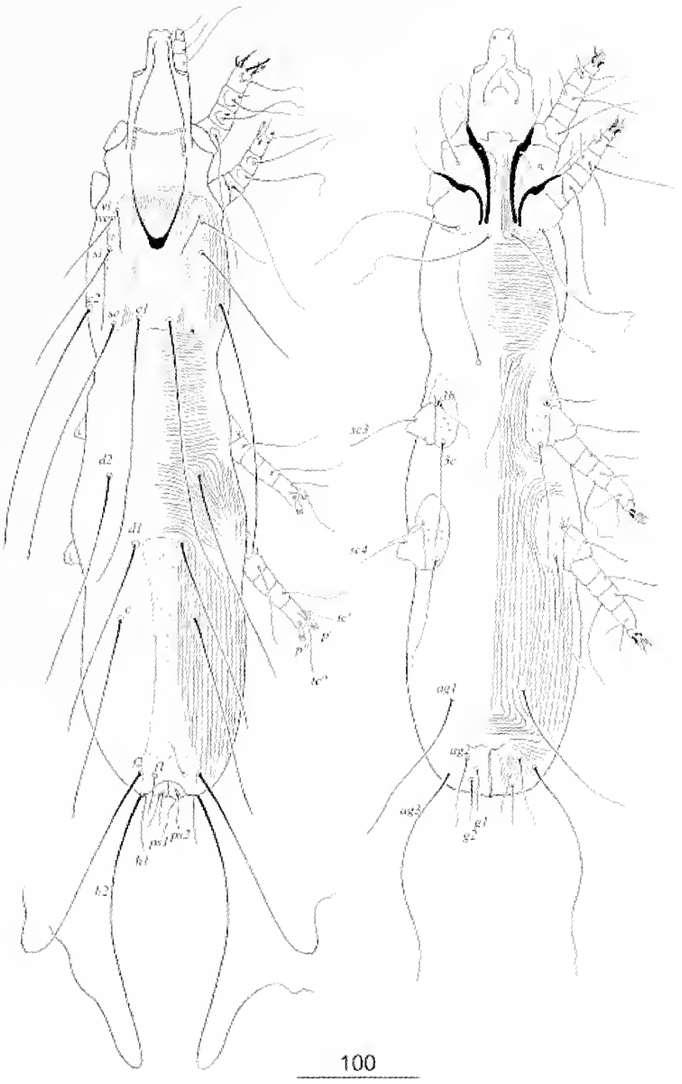

Figure 1. *Bubophilus aluconis* female
Left: dorsal view. Right: ventral view

Figure 2. *Torotrogla modularis* female
Left: dorsal view. Right: ventral view

The scale bars represent 100µm.

Drawings by Dr Maciej Skoracki.

***Torotrogla modularis* Nattress and Skoracki, 2007**

This species was originally described from Dunnock *Prunella modularis* from Sherburn in Elmet, West Yorkshire (SE4633) (Nattress & Skoracki, 2007). It has also been recorded in Poland.

Material examined 3 females and 1 nymph from quills (secondaries) of a Dunnock.

***Peristerophila columbae* (Hirst, 1920)**

This species was originally described from Rock Dove *Columba livia* from North America (Kethley, 1970). It has also been recorded from Turkey, Iran and India. It has now been recorded in West and South Yorkshire.

Material examined: 3 females and 4 nymphs from the under coverts of a feral Rock Dove; West Ardsley, near Leeds and 6 females and 1 larva from the axillaries of a feral Rock Dove from Darfield, South Yorkshire (SE4105).

***Meitingsunes columbicus* Skoracki, 2011**

This species was first described from Stock Dove *Columbia oenas* from Kazakhstan, It has now been recorded from the Wood Pigeon *Columbia palumbus* in South Yorkshire.

Material examined: 1 male, 19 females, 6 nymphs and 3 larvae from the under coverts of a Wood Pigeon from Ardsley, Barnsley (SE3805).

***Syringophilus bipectinatus* Heller, 1880**

The species was first described from domestic fowl *Gallus gallus domestica* and subsequently on Red-legged Partridge *Alectoris rufa* (Skoracki, 2011). It has now been recorded from domestic fowl in West Yorkshire.

Material examined: 6 females, 2 males and 2 nymphs from quills (tertials) of a domestic fowl from West Ardsley, near Leeds (SE2724).

***Bubophilus aluconis* Nattress & Skoracki, 2009**

This species was originally described from a Tawny Owl from South Yorkshire.

Material examined: 8 females and 2 nymphs from the greater coverts of a Tawny Owl from Worsbrough, South Yorkshire (SE3403).

Family Syringophilidae Lavoirpierre, 1953

Subfamily Picobiinae

***Picobia dryobates* (Fritsch, 1958)**

This species was originally described from Great Spotted Woodpecker *Dendrocopos major* from Germany. It has now been recorded from the same host from North Yorkshire.

Material examined: 3 females from the contour feathers, from the inter-scapular region, of a Great Spotted Woodpecker from Askham Bryan, SE5448.

Discussion

The world fauna currently embraces more than 240 species of quill mite assigned to 52 genera and two sub-families (Bochkov *et al*., 2004; Skoracki & Sikora, 2004; Skoracki, 2011), of these 14 species have now been recorded in Yorkshire.

Acknowledgements

I would like to thank Dr Maciej Skoracki of Adam Mickiewicz University, Poznań, Poland for his patience, considerable assistance and guidance and to Dr R. A. (Sandy) Baker for his continued help and encouragement. I would also wish to include Mr A. Norman, with his help I have been able to add records from South Yorkshire.

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Erratum

I notice that one of the plants on Plate XII of Naturalist 1078 has been misnamed. It is not Marsh Helleborine, but Marsh Cinquefoil. This used to be *Potentilla palustris* but has now been renamed *Comarum palustre* by the powers that be. See Stace's 3rd edition.

Phyl Abbott

A study of the parasitoids of the Horse-chestnut Leaf-miner in a Yorkshire garden.

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Introduction

The Horse-chestnut Leaf-miner *Cameraria ohridella* (Deschka & Dimic, 1986) is a highly invasive gracillarid micro-moth which has spread rapidly across Europe from Macedonia over the last thirty years. The moth was first reported in Britain in 2002 and arrived in Yorkshire during 2007, when it suddenly appeared in all five vice-counties (Frost *et al.*, 2007). I first noticed the mines on my garden Horse-chestnut tree in November 2007 and have been monitoring its progress ever since. It has been reported that *Cameraria ohridella* is almost entirely restricted to the common, white-flowered Horse-chestnut *Aesculus hippocastanum*, a tree native to the Balkans (Straw & Tilbury, 2006), but it also seems to fare rather well on the red-flowered hybrid growing in my garden. In the summer of 2011, after reading an article in *British Wildlife* magazine, I determined to discover whether the *Cameraria ohridella* in my Baildon garden are host to the same parasitoids that have been identified elsewhere in the country.

Method

The methodology employed in the study was an escalated version of that suggested by Michael Pocock and Darren Evans in their 'Conker Tree Science' project. On 1 July 2011 infested Horse-chestnut leaves were placed in sixty self-seal plastic sandwich bags and kept in a garden shed for the next month. They were inspected every few days to see what had emerged. A second leaf collection was made in the last week of August but this time with a much more manageable number of ten bags.

Most of the collected leaves produced several Horse-chestnut Leaf-miner moths but approximately 10% of the bags were also found to contain tiny parasitoid wasps, all members of the superfamily Chalcidoidea. These were collected into plastic pots and kept for identification using a key provided by Andrew Polaszek, Keeper of Entomology at the Natural History Museum. Dr Polaszek has a particular interest in parasitoid Hymenoptera and he kindly emailed me an electronic copy of the key and photographs that had been published in the *British Wildlife* magazine article (Pocock *et al*. 2011). The electronic version enabled me to enlarge the images easily and therefore see the subtle anatomical differences used to discriminate between the individual species.

A microscope was used at a magnification of x56 to inspect each specimen and determine the morphological features required to work through the key. These include characteristics such as the number of setae on the forewing's sub-marginal vein, the number of segments comprising the tarsi and the appearance of the mesoscutum and propodeum.

Although the Chalcidoids in general can be variable in colour, some species do sport distinctive, aesthetically pleasing hues. *Pnigalio mediterraneus*, for example, almost always has a violet/blue tinge on the thorax and tends to appear darker than *Pnigalio pecticornis* (G. Grabenweger, 2011, pers.comm.). The thorax of *Sympiesis sericeicornis* is, by contrast, described as being typically blue-green with violet tints (R R Askew, 2011, pers.comm.).

As a novice to the field of chalcid identification, I felt it necessary to have the collected specimens determined by experts. They were divided initially between The Angela Marmont Centre at The Natural History Museum and Dr Richard Askew, an authority on parasitic insects who is now retired and spending much of his time in France. The later *Pnigalio* specimens were sent to Dr Umberto Bernardo at the University of Naples, Italy.

Results

Apart from the adults of *Cameraria ohridella*, several other insects appeared in the bags. Two braconids (one aphidiine and one alysiine) must have been feeding on tiny insects that I had failed to brush from the leaves when bagging them up. I also released several spiders, many aphids, a couple of flower bugs and an adult ladybird during the course of the study.
Twenty-one chalcids were collected in total; sixteen from the main July sample and five from the smaller August collection (see Table 1).

Table 1. Numbers of 2 species of chalcid wasps, and their sex ratios, from leaf mines from collected Horse-chestnut leaves.

Species	Number	Sex Ratio (Female:Male)
Sympiesis sericeicornis (Nees)	4	3:1
Pnigalio species (Schrank)	17	7:10

Identifying specimens of the genus *Pnigalio* is challenging because of the large intraspecific variability of many traits used in the published keys. The males are also usually much smaller than the females and present difficulties in determination. The colour characteristics, which are useful in distinguishing the females, do not hold good for the males.

All of my *Pnigalio* specimens seemed to belong to the *pectinicornis-agraules-mediterraneus* complex. Some of the females were obviously *Pnigalio mediterraneus,* with their characteristic bi-coloured hind tarsi giving the appearance of whitish legs with black shoes (see Plate III, centre pages). Other specimens, particularly later in the season, were more reminiscent of *Pnigalio pectinicornis,* with a forewing speculum slightly too small for *agraules* and legs seemingly too dark for *mediterraneus*.

Pnigalio agraules and *Pnigalio mediterraneus* were synonymized in 1984 because they are often morphologically indistinguishable. In 2009, an Italian group of entomologists (Gebiola *et al.*) proposed the revalidation of *P. mediterraneus* based on DNA evidence, host ranges and the shape of eggs. Dr Umberto Bernardo, one member of this Naples-based team, inspected my Yorkshire *Pnigalio* specimens as part of his work studying the genetics of *Pnigalio mediterraneus,* a species which seems to have significant phenotypic plasticity.

Figure 1. A male *Pnigalio species*. Males of the Eulophinae subfamily often have branching antennae looking like four-pronged antlers.
This photograph also shows the setae on the forewing's submarginal vein.
D.Parkinson

Dr Bernardo is able to use visual characteristics to distinguish between females of *Pnigalio pectinicornis* and *Pnigalio mediterraneus* and states that *P. pectinicornis* has a bicoloured gaster with a metallic green upper and yellow-brown underside. His opinion is that the

speculum size and leg colour are too variable to be reliable discriminating features. The morphological identification of males is particularly difficult but these can be determined by molecular analysis of their mitochondrial DNA.

In October 2011, DNA was extracted from a sample of four male Yorkshire-caught *Pnigalio* specimens. Mitochondrial DNA was extracted and the aliquots sent, from Italy, to a laboratory in China for analysis. It was expected that the gene sequences would reveal the typical DNA barcode of *Pnigalio mediterraneus* but initial results (using only sequencing of the 28S ribosomal subunit) suggested that this was, in fact, a completely new species. The same species has already been found in two samples sent to Dr Bernardo from Harpenden and St. Albans, also derived from the same host.

Discussion

The recent arrival of *Cameraria ohridella*, in its abundance, has brought an unprecedented opportunity to easily collect specimens of the indigenous parasitoid Hymenoptera that are exploiting the occurrence. The Chalcidoidea, in particular, is a notoriously difficult group to identify, with the consequence that many entomologists steer clear of them. The collation of records of the parasitoids utilising *Cameraria ohridella* over the last few years has allowed the publication of an identification key which should greatly facilitate the entry of new recruits to the study of the parasitoid Hymenoptera. It is even possible that the Horse-chestnut Leaf-miner key could be used as a starting point to help identify (at least down to sub-family level) other chalcids emerging from the leaf-mines of common deciduous woodland trees and shrubs.

I was surprised not to find *Minotetrastichus frontalis* amongst the sample of twenty-one chalcids collected. In earlier studies (e.g. Grabenweger *et al.*, 2010) this native species has shown an impressive flexibility in being an early adopter of *Cameraria ohridella*. The parasitoids found to have been recruited by the Horse-chestnut Leaf-miner in my garden are currently confined to species of the Eulophidae family belonging to the subfamily Eulophinae.

Has the invasion of *Cameraria ohridella* had an adverse effect on the fortunes of other microlepidoptera species? The chalcid species involved in the assault on *Cameraria ohridella* are all polyphagous and attack a variety of unrelated host species. As an example, during July 2011 I also obtained *Sympiesis sericeicornis* (see Plate III, centre pages) from pupae of *Coleophora serratella* and *Phyllonorycter coryli* as well as the Horse-chestnut Leaf-miner.

The chances of a larva, from any particular species, being discovered by a parasitoid must surely be proportional to the numbers of parasitoids present in the vicinity; and parasitoid numbers are very likely to have increased as a result of the huge *Cameraria ohridella* populations now at their disposal. It is only anecdotal evidence but the numbers of *Phyllonorycter tristrigella, Stigmella ulmivora and Stigmella lemniscella* leaf-mines on my garden's elm trees certainly seemed to be much fewer in 2011 and I don't remember a year when I have seen so little of the normally abundant *Epiphyas postvittana*. The parasitoid population should eventually stabilise as a result of secondary parasitism, particularly when *Minotetrastichus frontalis* arrives on the scene. The larvae of this species are known to develop either as primary parasitoids on leaf-miner larvae or as hyperparasitoids or as cleptoparasitoids (Grabenweger *et al.*, 2010).

I was drawn into the study of *Cameraria ohridella's* parasitoids by the possibility of finding one of the three ichneumonoids known to attack the Horse-chestnut Leaf-miner but the

preponderance of chalcids found opened up a whole new field of entomological study for me. The results from my garden tree suggest that only a small range of our native generalist parasitoids have, so far, been recruited by *Cameraria ohridella*. Studies in Europe (Grabenweger *et al.*, 2010) have already shown that the parasitism of *Cameraria ohridella* tends to increase with host residence time and that a minimum period of at least two decades seems to be needed for a basic adaptation of native parasitoids to this novel host.

Conclusion

Indigenous parasitoids are inevitably slow to colonise a new host, but most leaf-miner parasitoids are generalists, so there is no real (intrinsic) barrier to their using that host. Many are also facultative hyperparasitoids and more work is needed to see how the parasitoid complex of *Cameraria ohridella* develops over the course of its next few years in Yorkshire. In 2012, I hope to enlist the help of other naturalists to try and establish what is happening across the whole county.

Acknowledgements

I am grateful for the help and encouragement provided by Dick Askew, Andrew Polaszek, Umberto Bernardo, Giselher Grabenweger and Mark Shaw.

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Greater Wax Moth in Yorkshire*

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Introduction

Galleria mellonella, known in beekeeping circles as the Greater Wax Moth, is a member of the lepidopteran family Pyralidae (see Plate IV, centre pages). It can be a serious pest of Honey Bee *Apis mellifera* colonies as well as the nests of other colonial aculeate hymenopterans which make wax and store honey. The moths fly at night around affected beehives and occasionally come to light. The larva feeds on honeycomb, which it riddles with silk-lined galleries, along which it can move with speed if disturbed. It is well known to beekeepers in the southern English counties, where larvae can overwhelm honeycomb and cause the collapse of Honey Bee colonies. Full-grown larvae can gnaw shallow cavities in the wooden beehive structure but mainly the comb frames, into which they spin silken cocoons where they hibernate, pupating in spring. Sometimes masses of cocoons occur together (Goater, 1986).

In recent years there has been a strong trend for southern European moth species to expand their ranges into Britain and for southern British moths to spread north to colonise the Yorkshire and north British region (Beaumont, 2003). An increase in the numbers and range of *Galleria mellonella* was noted in southern England and Wales by Waring (2005), suggesting that a northerly expansion was underway.

Recent status change in Yorkshire

Although known in West Yorkshire from a single 19th century record by Edwin Burchall in Leeds, where it was noted that "The larva feed in the comb in old bee-hives" (Porritt, 1883), there had been no subsequent records for the Yorkshire region until the mid-1990s when small numbers began to come to the attention of lepidopterists running light traps (Beaumont, 2002).

In 2005 an enquiry at Doncaster Museum (*re* a lepidopteran larva in a jar of honey comb from a department store customer care manager) revealed that the Greater Wax Moth had at last reached Yorkshire beehives. Realising the scarcity of North of England records, as indicated by the entomological literature, the Yorkshire Beekeeping Association and its network of affiliated local Beekeeping Societies were contacted for comment. Responses were rapid, abundant and comprehensive. Current and retrospective information generously provided by the beekeeping fraternity was combined with Yorkshire moth trapping data, collated and provided by Harry Beaumont. Subsequent records have been collated from Frost (2005, 2006, 2009). This exercise of cooperation between two distinctly separate interest groups quickly revealed an unappreciated invasion timetable and distribution pattern. The species was well established in commercial hives, had already contributed to the demise of some Honey Bee colonies, and in south, west and east Yorkshire had escalated to the status of an agricultural pest.

Further to *G. mellonella* affecting native colonial aculeates, in 2004 a nest of *Bombus lapidarius* in a hive in a garden in Swanland (VC61 - SE994285) was badly infested (Stewart Beckett pers. comm.).

Figure 1 monitors the frequency of reported occurrences up to 2006 from the moth's first post 19th century occurrence in 1995, when it was taken at light by Ian Heppenstall in Rossington (VC63) close to the vice-county's southern border with Nottinghamshire. The next rather discontinuous report was from Harrogate (VC64) in 1997 by L.V. Ratcliffe, followed by the first VC61 record from the north side of the Humber mouth at Spurn peninsula in 1998 by Barry Spence and the first VC62 record from Sleightholmedale in 2003 by G.W. Follows. Subsequently its first record from just over the VC65 border at Hutton Conyers came in 2009 by Charles Fletcher. First evidence of it invading managed apiaries (mainly stored comb) dates from 2000 with a rapid escalation reported by beekeepers from 2002 onwards.

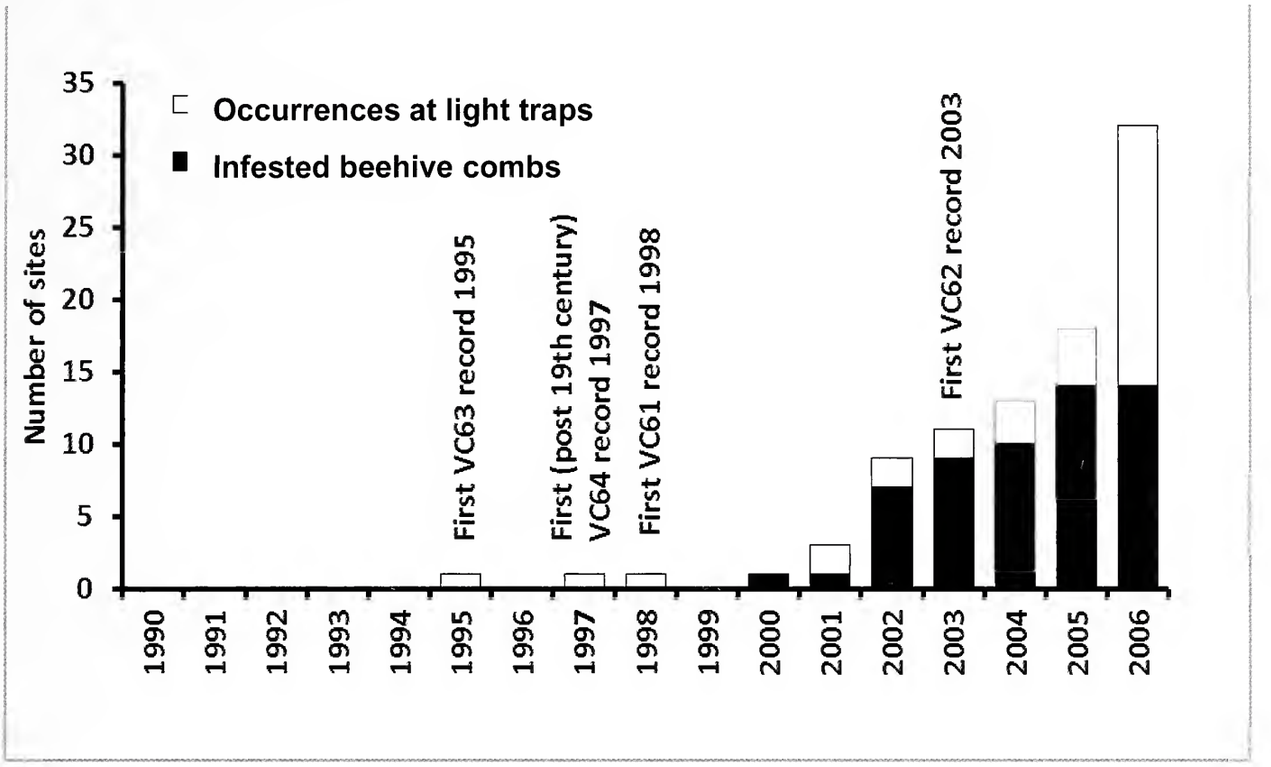


Figure 1. Increases in the numbers of recorded sites for Greater Wax Moth *Galleria mellonella* in Yorkshire. Data from YBKA beekeepers and YNU moth trappers.

The preliminary distribution map (Figure 2) demonstrates the moth's geographical spread to 2009. The solid dots show where beekeepers have experienced problems of larval infestations of beehive comb and the stars show where lepidopterists have caught flying adults at light traps. Importantly, the lepidopterists' records indicate that wax moths have already extended well into North Yorkshire, the most northerly sites being the Ripon area (VC64) and Sleightholmdale (VC62). This indicates that beekeepers operating in the Dales edges, northern Vale of York, North York Moors and the Cleveland regions should look out for infestations.

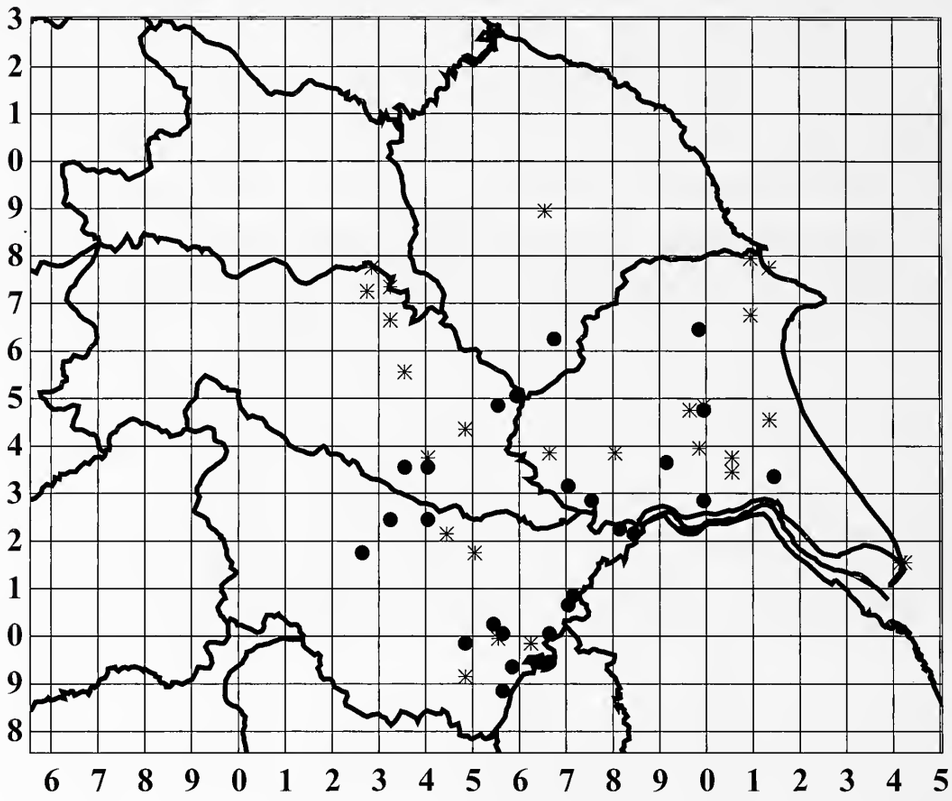


Figure 2. Distribution of *Galleria mellonella* as indicated by (●) 'comb infestation' reports by beekeepers and (·) lepidopterists' light trap records.

The lack of recorded sites in Pennine and western regions of South and West Yorkshire and the northern and coastal parts of VC62 probably reflects a genuine absence, since these areas are well monitored by moth trappers as indicated in the distribution of trap sites for the National Moth Night 2009 (Frost, 2009).

Since Wax Moth distribution is limited by its inability to survive prolonged periods of cold, it tends to avoid high altitude and high latitude regions (Jeanne, 1982). Indeed a technique used by beekeepers to 'sterilise' beekeeping equipment is to treat it to periods in deep freeze. Though some Yorkshire beekeepers have been aware of the regular presence of the Lesser Wax Moth *Achrioia grisella,* until recently the Yorkshire region was thought to be too chilly for the more damaging *Galleria mellonella.* Contact with beekeeping associations in counties adjacent to Yorkshire suggest that to the west of the Pennines it has now reached as far north as Newcastle-under-Lyme, Staffordshire (SJ84). There seems to be no reported colonisation of Cheshire or Lancashire as yet but in 2006 it appeared in Cumbria. Such a discontinuous occurrence could be due to bee colonies being transported around the countryside in order to harvest specific nectar crops or through the purchase of affected colonies or equipment. To the east it has become widespread in East Anglia and Lincolnshire with a range of sites known in North Lincolnshire, including the southern bank of the Humber at Barton on Humber (TA02) and Saltfleet (TF49) south of the Humber mouth, a distribution that probably accounts for its early occurrence at Swanland and Spurn. No infestations have yet been reported in the northern parts of VCs 62 and 65, the Cleveland region of Watsonian Yorkshire or in Durham. It will be interesting to see if the prolonged and intensely cold spells during the winters of 2009-10 and 2010-11 have slowed the wax moth's northerly spread.

Plate I. Beal Carrs, the favoured birding site of former YNU president, John Wint (see p4).

Plate II. Strensall Common (see p11).
Below: Dark-bordered Beauty *Epione vespertaria* habitat. *D.Baker*
Left: Creeping Willow *Salix repens*, the food-plant of the moth. *D.Baker.*
See photographs of the moth on the back cover.

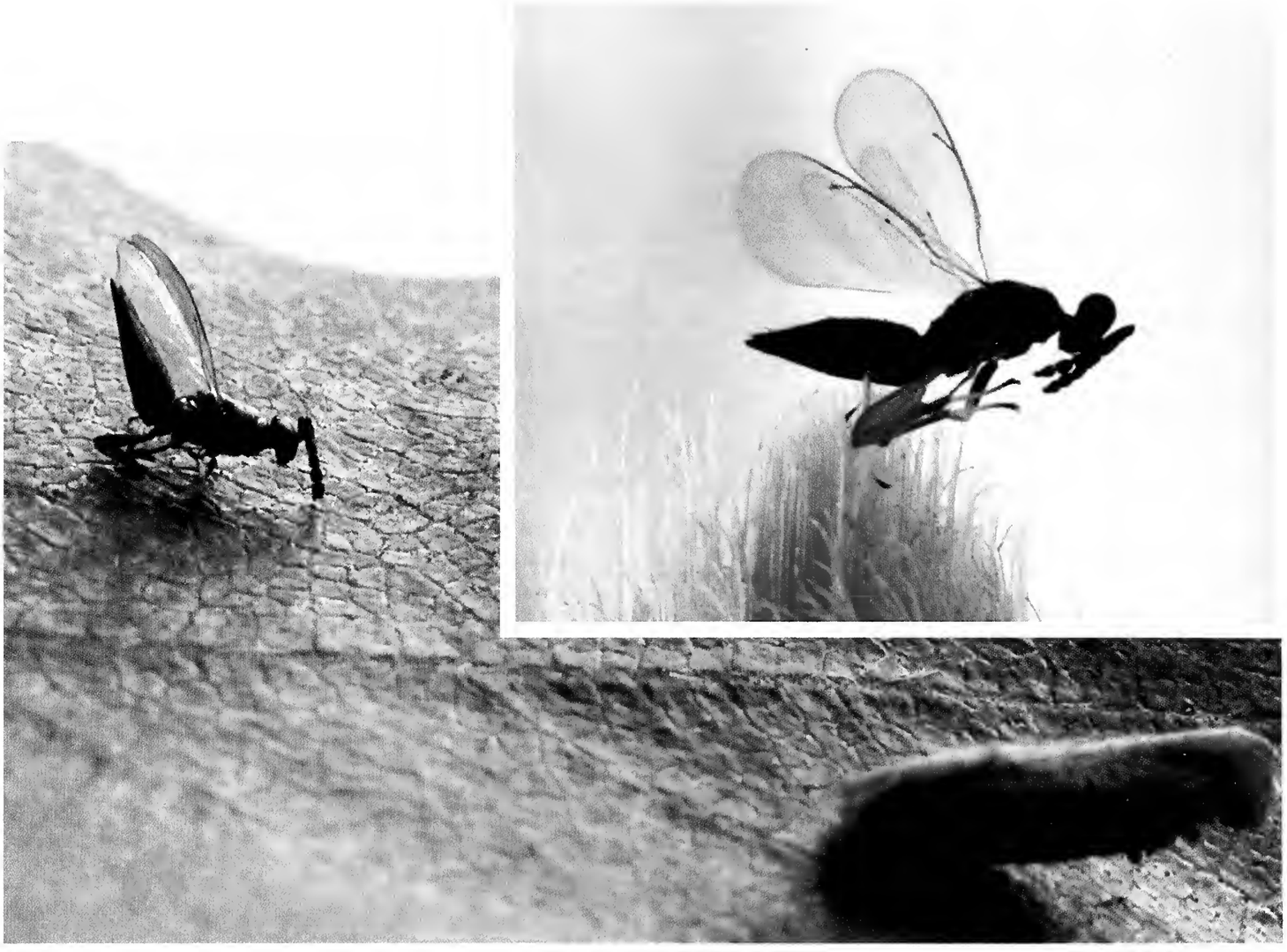


Plate III Parasitoids of the Horse-chestnut Leaf-miner *Cameraria ohridella* (see p34).
Above: Sympiesis sericeicornis is extremely polyphagous. This one has emerged from a pupa of *Coleophora serratella*, a case-bearing micro-moth.
Above right (inset): *Pnigalio mediterraneus,* one of the commonest parasitoids recruited by *Cameraria ohridella* in the United Kingdom.
Left: A female chalcid wasp newly emerged from a leaf-mine.
all D.Parkinson

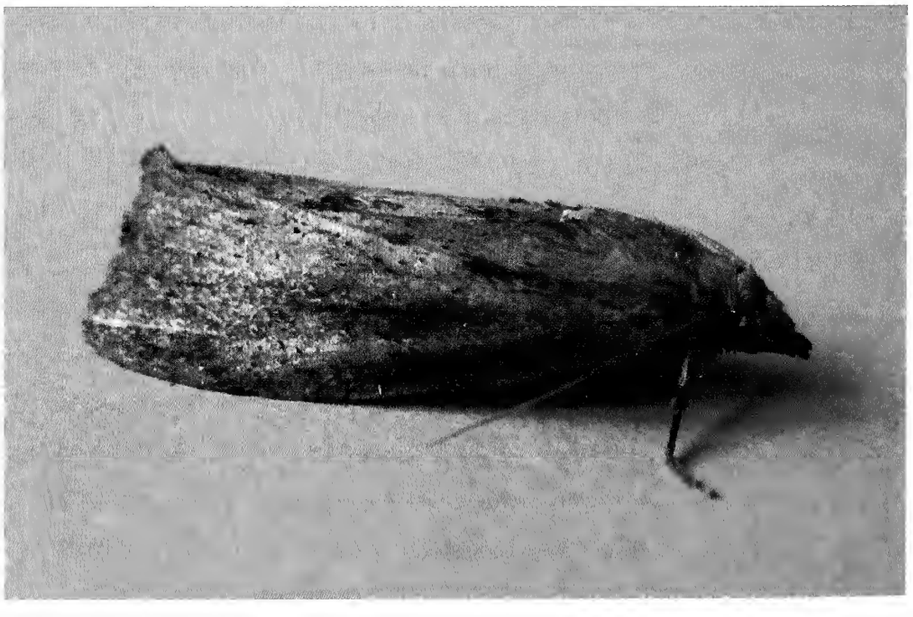


Plate IV. Greater wax moth *Galleria melonella,* from a moth trap in Kirk Smeaton, VC63 (see p38).
D.Williamson

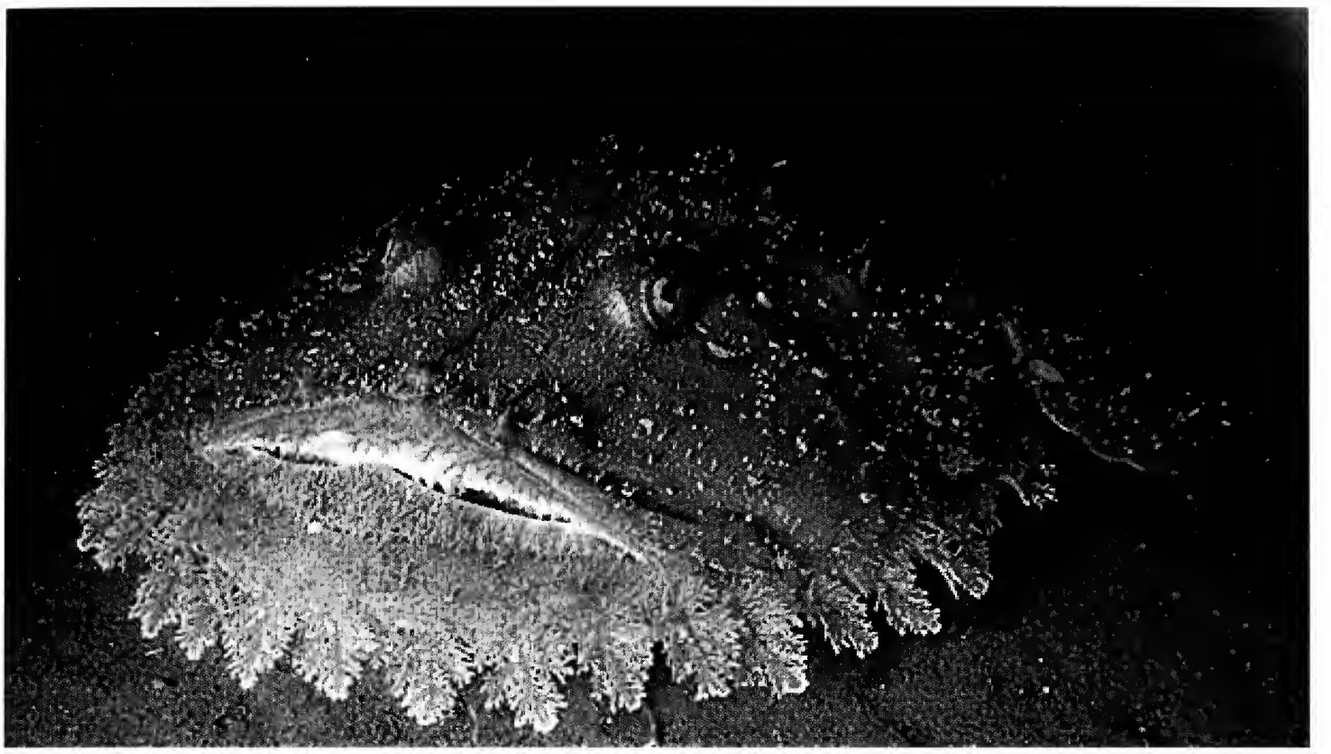


Plate V. Black-bellied Angler fish *Lophius budegassa* (see p16).
© Gianni Neto and FishBase. www.fishbase.org

Plate VI. Plant galls noted during 2011 (see pp48,49).
Above left: *Aceria tenuis* causing distortion of the flower-head of Cock's-foot *Dactylis glomerata.*
Above right: Cryptomyzus korschelti an aphid gall on *Ribes alpinum.* *J.Newbould*

Plate VII. Unusual botanical records in 2011 (see p 51).
Left: Lizard orchid *Himantoglossum hircinum* near Doncaster. *L.Hill*
Below left: A single flower of Lizard Orchid. *L.Hill*
Above: Alpine Cotula *Cotula alpina*, Roundhay Park, Leeds *P.Abbott*

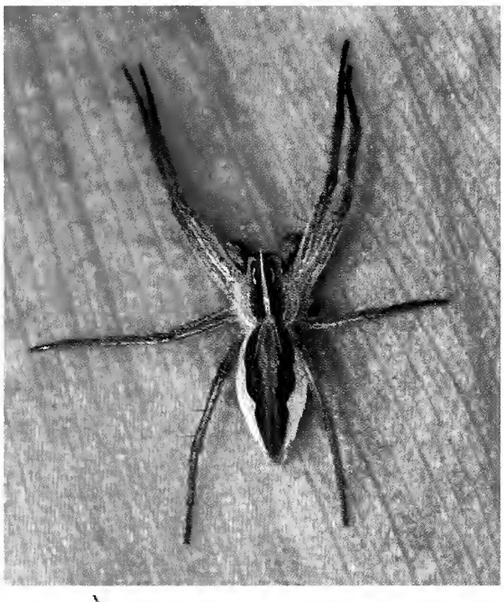
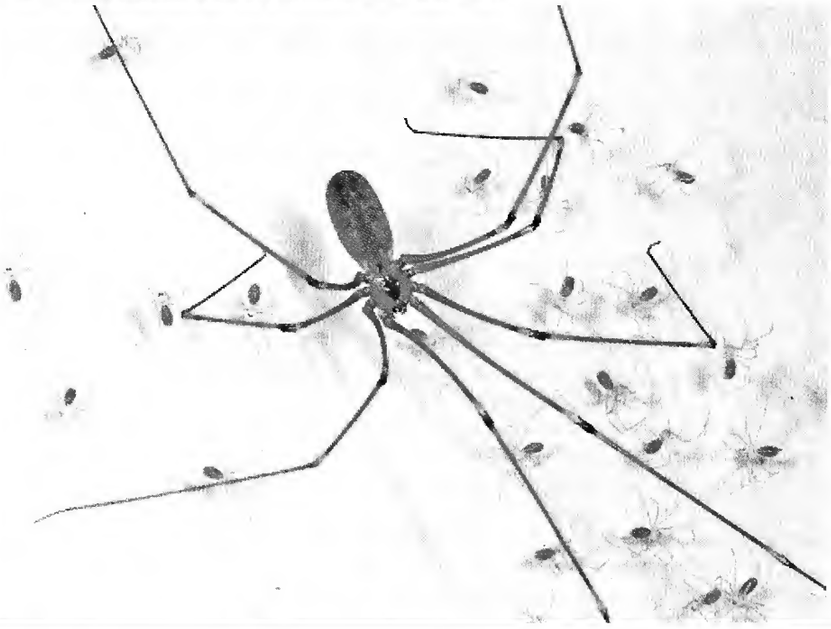


Plate VIII. Common but probably under-recorded Yorkshire spiders (see p59).
Left: Nursery Web Spider *Pisaura mirabilis*. *P.Simmons*
Below: Daddy-long-legs Spider *Pholcus phalangioides* female with young. *R.Key*



Goater (1986) notes that the flight season extends from June to October, probably in two overlapping broods. Figure 3 confirms the extent of the flight period and suggests peaks of activity in mid-July and mid-September.

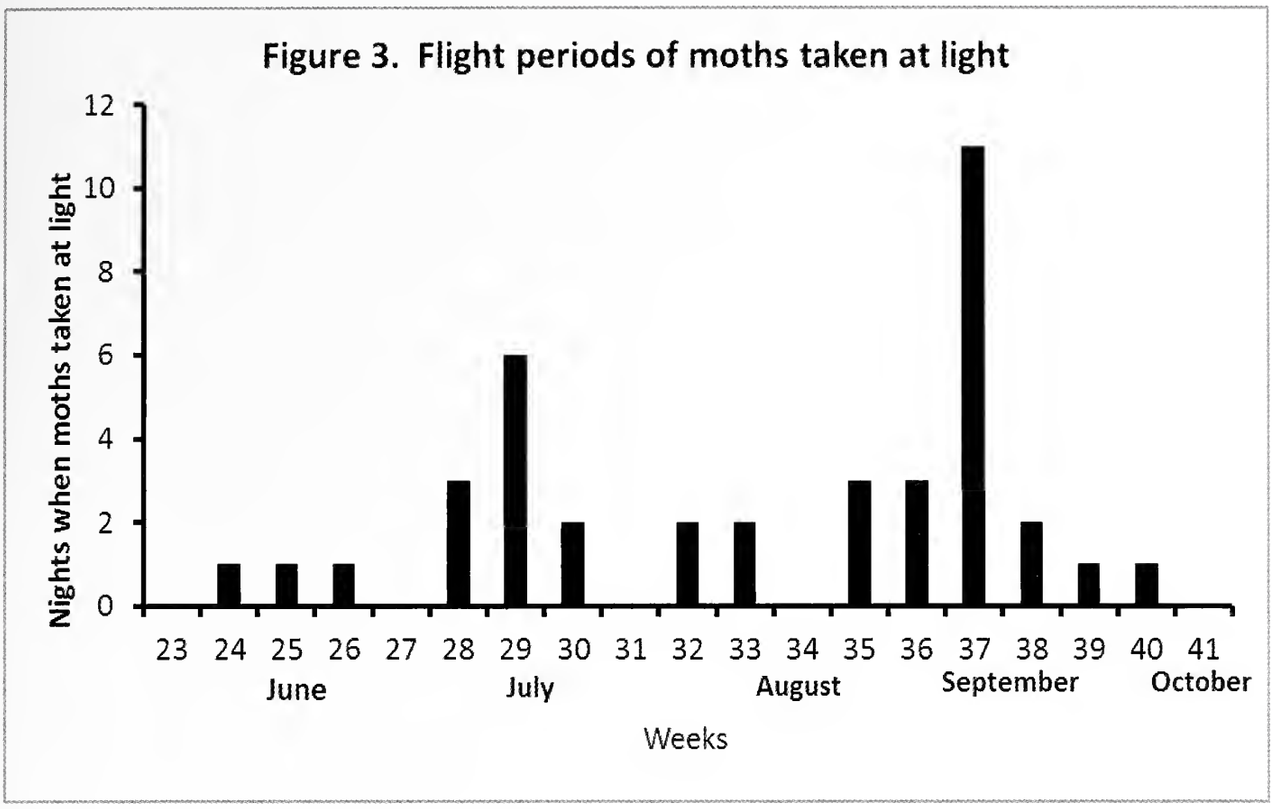


Figure 3. Flight periods as indicated by number of nights when moths were taken at light. Data from Beaumont (pers comm.) and Frost (2005, 06, 09).

Exotic pet and bird food

Although warmer weather conditions have probably been necessary to allow *G. mellonella* to sustainably colonise the Yorkshire region, larvae, marketed as 'waxworms' for bird feeding and the exotic pet trade, have been mentioned by several beekeepers as an alternative source of spread. Since the majority of suppliers and exotic reptile enthusiasts are concentrated in the conurbations of South and West Yorkshire, this distribution has not been picked up by this study, even by urban lepidopterists running moth traps in their back gardens. It would seem that this speculation is not proven.

Acknowledgements

This project has only been possible by pooling information from two mutually exclusive interest groups (the beekeepers and the moth trappers). Thanks are due to the following Yorkshire beekeepers for so helpfully responding to the appeal: Dr David Aston, Dave Barrett, June Barrit, Stewart Beckett, Bill Cadmore, Phil Cunningham, J. Fuller, Mick Mee, Pam & Chris Milner, Vera Rider, Dave Shannon, R. Smith, Tim Stanforth, Andrew & Debby Tyzac and Janet & David Woodward.

I would also like to thank Mr Harry Beaumont, micro-lepidoptera recorder for the Yorkshire Naturalists' Union, for providing moth-trapping records from the network of Yorkshire lepidopterists: D. Baker, Harry E. Beaumont, R. F. Botterill, David and Diane Bowes, E. David Chesmore, Keith Clarkson, John W. Cooper, Mike J. Coverdale, A.S. Ezard, Charles Fletcher, G.W. Follows, Peter Greaves, Peter Gregory, Jennifer S. Holland, R. Ian

Heppenstall, Andrew Jackson, Martin Limbert, Brian and Sue Moreland, Steve. Morgan, A. B. Nolan, L.V. Ratcliffe, Barry R. Spence, P. Sutton, Jill C. Warwick, Philip Q. Winter.

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Spiders of Rodley Nature Reserve*

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Introduction

Rodley Nature Reserve (NR) lies within the River Aire's floodplain on the western edge of Leeds, West Yorkshire, on land that was once part of Yorkshire Water's Sewage Treatment Works (SE 235363). It lies entirely within VC64 (mid-west Yorkshire) and covers an area of approximately 30ha. From the summer of 1999, a series of wetland areas was created, hedgerows planted and grassland management changed to benefit wildlife, in particular birds, but also biodiversity in general to enhance the site's wildlife conservation value. Therefore, the majority of the habitats as managed (by Rodley Nature Reserve Trust Ltd) today are recent in origin, being less than ten years old.

The ongoing study at Rodley NR was prompted following a cursory search on the National Biodiversity Network's website (http://data.nbn.org.uk/) in early 2008 for the spider fauna recorded within the two hectads that in general cover Leeds (SE23 and SE33) and discovering that less than 100 species had been recorded. Comparison of this with the most recent published national list of 645 species (Merrett and Murphy, 2000) and experience in recording elsewhere in the UK suggested that this reflects a low level of recording effort. An initial visit to the Nature Reserve was completed in early April 2008 and it was agreed with the community-run management committee that a study would be undertaken, concentrating

on the three main habitats present on the site. Surveys have continued, though the extent and intensity have varied, in 2009 and 2011.

Site Description

The main habitats on site (Table 1) can be divided into three broad categories: grassland, wetland and secondary woodland/scrub (including hedgerows). The grasslands, owing to their origin, are classified as improved grassland following the Phase 1 habitat survey methodology (Anon, 2003), although attempts are being made to diversify them by undertaking annual hay cuts and artificially introducing new species with seed. The wetlands were created in 1999 with a primary function of attracting wildfowl by artificially managing water levels and are currently a mosaic of swamp, marshy grassland and marginal and inundation vegetation dominated by Common Reed *Phragmites australis*. Woodland on the north bank of the River Aire largely consists of mature willows (in particular Crack Willow *Salix fragilis*) and Ash *Fraxinus excelsior*. In the centre of the Reserve is a rectangular plot of planted willow that is being partially managed as a coppice plot. Bramble *Rubus fruticosus* agg. scrub is also prevalent in this habitat. The site's hedgerows are largely recent in origin, dominated by Hawthorn *Crataegus monogyna* and Blackthorn *Prunus spinosa*.

It was decided to study three principal habitats within the Reserve to establish a baseline from which further investigations could proceed - improved grassland, hedgerows and marginal wetland habitats. These different habitats, subject to various management practices and having dissimilar vegetation structure, provide spiders with different ecological niches to exploit.

Methodology

A range of methods was employed within the Reserve during this study. Pitfall traps were used during early spring until midsummer (i.e. March/April until late June) in 2008 and 2009, supplemented by sweep-netting, grubbing at the base of vegetation and beating foliage. During 2010 and 2011 collecting was on a more *ad hoc* basis but this continued to yield new records for the Reserve and the hectad.

The programme of pitfall traps was timed to coincide with one of the main peak activity periods for spiders, i.e spring and summer. No studies were undertaken during the winter months but an effort to do so may well result in the addition of poorly recorded species that are 'winter-active'; i.e., they are sexually mature during this season. Spiders were identified using Roberts (1993).

Limitations to the Study

Species-poor grassland (including areas that are periodically inundated) and reedbeds predominate within the Reserve. The only extensive 'wooded' habitat is represented by a rectangular willow coppice plot,managed on a rotational basis, and the network of hedgerows that have been planted in the last decade. It is the Trust's policy to prevent access to the coppice plot during the bird breeding season (nominally March until August) so no collecting has been possible within this habitat. Consequently, any species associated with leaf-litter, dead wood (including loose bark) and woodland habitats in general are unlikely to be recorded unless they happen to be associated with the hedgerows.

The grasslands are currently species-poor and of relatively uniform structure, though management is beginning to succeed in altering this situation. The site's historic use and management and the restricted number of habitats will limit the number of species present in

the immediate future but ongoing management sympathetic with nature conservation, including diversification of the wetland, grassland and woodland habitats, in particular with respect to structure, could well benefit spider diversity in years to come.

Collecting Locations

Pitfall traps were set up in three locations across the Reserve during 2008 and 2009 (see Table 1). Arrays of four pitfall traps were located in each habitat and were collected and re-filled on an approximately fortnightly basis. The contents of pitfall traps were pooled before sorting and identification.

Table 1: Location of pitfall traps at Rodley NR

Location	Grid Reference	Habitat Description
Grassland	SE 2357 3631	Neutral grassland overlying a former waste tip. Grassland structure varied within the compartment. Area around pitfall traps sown with a wildflower meadow mix, dominated by Red Clover *Trifolium pratense* and fine-leaved grasses (e.g. Red Fescue *Festuca rubra* agg.). Other areas are dominated by Common Couch *Elytrigia repens*, especially towards hedgerow.
Hedgerow	SE 2357 3634	Pitfall traps located at the base of a Hawthorn-dominated hedgerow. Ground flora mostly Common Nettle *Urtica dioica* and Common Couch with occasional Cleavers *Galium aparine*.
Wetland Edge	SE 2367 3618	Pitfall traps located on the edge of a marshy 'lagoon' amongst bare ground with common reed *Phragmites australis* leaf-litter. Water levels fluctuated through the course of the study, eventually swamping the pitfall traps.

Collecting by other methods was undertaken at various locations within the Reserve but significant effort was only employed in habitats closely associated with the pitfall trap locations.

Results

A total of 68 species of spider (930 individuals; 443 separate records) was recorded by all methods used in the four years that the study has covered. They are listed in taxonomic order in Table 2 following the national checklist published by Merrett and Murphy (2000).

Whilst the majority of species recorded are common (i.e. of no particular conservation concern), two species are listed as nationally Notable (Harvey et al., 2002). The Gorse *Ulex europeaus* bushes, planted on an embankment that screens the adjacent sewage treatment compound (SE 234363) and known as the 'butterfly bank', were investigated on 30 May 2009. Ten species were collected, including common ones such as the crab-spider *Philodromus cespitum* and the comb-footed spiders *Neottiura bimaculata* and *Theridion tinctum*. Three small money-spiders were also knocked from the Gorse. One individual was the fairly common and widespread *Entelecara acuminata* but two females were tentatively identified as *Entelecara congenera*, a nationally Notable species. It is very similar to *E. acuminata*, in particular the female, the main diagnostic character being the distance between the two posterior eyes! The specimens were initially sent to the national spider recorder (Peter Harvey) who confirmed that he was happy with my determinations. He suggested that, for a second opinion, they should be sent to Dr. Peter Merrett who

subsequently confirmed that the two specimens collected are indeed this species. This was a completely new species for the vice-county and an extension to its known range in the British Isles. *E. congenera* is a scarce species, typically recorded on pine, gorse, heather and other bushes (Harvey *et al.*, 2002) so the specimens were collected in its known habitat.

The second species is *Porrhomma errans,* represented by a single male captured in one of the pitfall traps set in the grassland. Whilst not a new record for the vice-county (there being two historical records in 1990 at Wighill, near Boston Spa), it is still a scarce species nationally. This is a spider whose precise habitat requirements are unknown, although all previous records are associated with grassland of some description (Harvey *et al.*, 2002).

The draft national status review lists *P. errans* as Near Threatened (Dawson *et al.*, 2008), which means that it is close to qualifying for a threatened category (Critically Endangered, Endangered or Vulnerable) in the near future (Anon, 2001).

Further Recording

Rodley is a community-run nature reserve, managed and administered by locals in Leeds with advice from a wide range of partners. Historically, there has been a focus on birds and mammals and, in common with most sites, there is a lack of information about other groups. The annual fungus foray yields a number of species each year but this is based on a single date. No formal survey has been completed. To my knowledge, there have been limited, if any, formal botanical surveys.

Some of the more popular invertebrate orders, notably Odonata, are recorded (Mill, 2011). Casual records of butterflies are collated and a moth trap is run intermittently during the spring and summer. Recently, records of aquatic beetles have been obtained following a visit by Martin Hammond and beetle species collected by me have been passed on to Bob Marsh (YNU Recorder for the group) for identification. Apart from a dozen or so hoverfly species and a handful of bumblebee species, no other invertebrate group has been recorded in any detail to my knowledge.

Consequently, there is considerable scope for visiting specialists to provide a baseline survey for their group(s). Diptera, Heteroptera, Coleoptera and Mollusca in particular are very poorly or not yet recorded on the Reserve. Given that the Reserve has only existed since late 1999, there is also considerable scope to influence the management of the Reserve, or even create habitats anew to benefit a specific group. The creation of the 'dragonfly ponds' is an example of the latter and shows how the inspiration, enthusiasm and leadership of the local community can create a real sense of nature conservation in an urban nature reserve.

If anyone wishes to record on the Reserve, please contact Peter Murphy (pandbmurphy@ntlworld.com) in the first instance.

Acknowledgements

I would like to thank Rodley NRT Management Committee, in particular Shirley Carson and Peter Murphy who gave me permission. To Peter Harvey and Dr. Peter Merrett I extend my gratitude for confirming specimens.

Table 2: Species of Spider Recorded at Rodley NR, Leeds (April 2008 to December 2011).

Family	Taxon	Status
Pholcidae	*Pholcus phalangioides* (Fuesslin, 1775)	
Theridiidae	*Theridion sisyphium* (Clerck, 1757)	
	Theridion tinctum (Walckenaer, 1802)	
	Neottiura bimaculata (Linnaeus, 1767)	
	Paidiscura pallens (Blackwall, 1834)	
Linyphiidae	*Walckenaeria antica* (Wider, 1834)	
	Walckenaeria unicornis O.P.-Cambridge, 1861	
	Dicymbium nigrum (Blackwall, 1834)	
	Dicymbium tibiale (Blackwall, 1836)	
	Entelecara acuminata (Wider, 1834)	
	Entelecara congenera (O.P.-Cambridge, 1879)	Nb
	Gnathonarium dentatum (Wider, 1834)	
	Dismodicus bifrons (Blackwall, 1841)	
	Hypomma bituberculatum (Wider, 1834)	
	Baryphyma pratense (Blackwall, 1861)	
	Baryphyma trifrons (O.P.-Cambridge, 1863)	
	Oedothorax gibbosus (Blackwall, 1841)	
	Oedothorax fuscus (Blackwall, 1834)	
	Oedothorax retusus (Westring, 1851)	
	Tiso vagans (Blackwall, 1834)	
	Lophomma punctatum (Blackwall, 1841)	
	Gongylidiellum vivum (O.P.-Cambridge, 1875)	
	Erigonella hiemalis (Blackwall, 1841)	
	Savignia frontata Blackwall, 1833	
	Diplocephalus latifrons (O.P.-Cambridge, 1863)	
	Erigone dentipalpis (Wider, 1834)	
	Erigone atra Blackwall, 1833	
	Porrhomma pygmaeum (Blackwall, 1834)	
	Porrhomma errans (Blackwall, 1841)	Nb
	Meioneta saxatilis sens. str. (Blackwall, 1844)	
	Centromerita bicolor (Blackwall, 1833)	
	Bathyphantes gracilis (Blackwall, 1841)	
	Kaestneria pullata (O.P.-Cambridge, 1863)	
	Diplostyla concolor (Wider, 1834)	
	Lepthyphantes tenuis (Blackwall, 1852)	
	Lepthyphantes zimmermanni Bertkau, 1890	
	Lepthyphantes flavipes (Blackwall, 1854)	
	Lepthyphantes ericaeus (Blackwall, 1853)	
	Lepthyphantes pallidus (O.P.-Cambridge, 1871)	
	Neriene clathrata (Sundevall, 1830)	
	Microlinyphia pusilla (Sundevall, 1830)	

Family	Taxon	Status
Tetragnathidae	*Tetragnatha extensa* (Linnaeus, 1785)	
	Tetragnatha montana Simon, 1874	
	Pachygnatha clercki Sundevall, 1823	
	Pachygnatha degeeri Sundevall, 1830	
Araneidae	*Araneus diadematus* Clerck, 1757	
	Araneus quadratus Clerck, 1757	
	Larinioides cornutus (Clerck, 1757)	
	Larinioides sclopetarius (Clerck, 1757)	
	Araniella cucurbitina sens. str. (Clerck, 1757)	
	Araniella opisthographa (Kulczynski, 1905)	
	Zygiella x-notata (Clerck, 1757)	
Lycosidae	*Pardosa palustris* (Linnaeus, 1758)	
	Pardosa pullata (Clerck, 1757)	
	Pardosa amentata (Clerck, 1757)	
	Pirata piraticus (Clerck, 1757)	
Pisauridae	*Pisaura mirabilis* (Clerck, 1757)	
Dictynidae	*Dictyna arundinacea* (Linnaeus, 1758)	
	Dictyna uncinata Thorell, 1856	
Clubionidae	*Clubiona reclusa* O.P.-Cambridge, 1863	
	Clubiona stagnatilis Kulczynski, 1897	
	Clubiona phragmitis C.L.Koch, 1843	
	Clubiona lutescens Westring, 1851	
Thomisidae	*Philodromus aureolus* (Clerck, 1757)	
	Philodromus cespitum (Walckenaer, 1802)	
	Tibellus oblongus (Walckenaer, 1802)	
	Xysticus cristatus (Clerck, 1757)	

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A selection of interesting plant galls seen in Yorkshire in 2011

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***Contarinia scrophulariae* -** a Diptera gall on Common Figwort *Scrophularia nodosa*.
My attention was first drawn to this gall on 9 June 2011 on a Dorset Flora Group visit to Chetterwood (VC9 – ST972079). It was on Common Figwort growing amongst Bracken along a ride adjacent to a coniferous plantation. To my great surprise, I found the same gall in a similar habitat in Newtondale (SE823939) on 9 July 2011 whilst accompanied by Adrian Norris on the YNU VC62 excursion. The flowers of the plant are swollen and remain closed and in both instances all the flowers on the stem were affected. Returning home, I checked the distribution on the NBN Gateway (http://data.nbn.org.uk/directory/browse). I found just two squares with records – one in north-east Scotland and the second in Sussex. Dorset Environmental Records Centre has no records whilst the YNU Diptera Recorder, Andrew Grayson, reported three published records: Mr W. Falconer reported the gall on 'Knotted Figwort' from Lister Park (VC64)(Anon, 1923); J.M. Brown recorded the gall in the Skipton area (VC64) (Anon, 1933) and Miss C.M. Rob recorded the gall at Kirkham Abbey (VC61) (Anon, 1959). The 2011 records are new to both VC9 and VC62 based on information available. The British Plant Gall Society also holds records from VC10, 23, 32 and 44.

Aceria tenuis an Eriophyoid gall on Cock's-foot *Dactylis glomerata*.
This gall (see Plate VI, centre pages) distorts the flower head of grasses and is described in Redfern and Shirley (2011) as common. However, I see a lot of Cock's-foot on my surveys but rarely see this gall. On 18 July 2011, whilst surveying with the Sutton Poyntz Biodiversity Group in a meadow associated with the Sutton Poyntz Waterworks (SY706842), I found just one Cock's-foot flower-head galled. Whilst on the YNU VC65 excursion to Gunnerside on 13 August 2011, W.A. Ely and I decided to visit the adjacent 10km square at Thwaite. Having recorded a small number of common galls in our chosen area, we returned to the car parked on a roadside verge (SD893979) when I observed the *A. tenuis* again on Cock's-foot. A specimen was collected and shown to Tom Higginbottom (YNU Plant Gall Recorder) who confirmed the determination. Redfern (2011) describes such galls as open galls consisting of non-glandular hairs, which shelter the mites. Once again, a search on the NBN Gateway produced few records, with the majority being in Shropshire and just one Yorkshire record in VC63 from the Humberhead Levels contributed through the Yorkshire Wildlife Trust. From known data these records appear to be new to VC9 and VC65.

Trioza galii a Psylloid gall on Crosswort *Cruciata laevipes*.
This is an artichoke gall usually on Crosswort but may also be found on other species of *Galium* and is the only gall on Field Madder *Sherardia arvensis*. This was found in VC65 on 12 August 2011 at Whaw (NY990045) and the following day in Rowleth Great Wood (SE037994), both on Crosswort. In Yorkshire in 1958 C.M. Rob found the gall at Catton, Thirsk (VC62), reported in the *The Naturalist* 83 p21 via G.F. Gilmore in the Plant Gall report. The NBN Gateway shows a large number of records from W.A. Ely via data supplied by Rotherham Biological Records Centre from SK48, SK49, SE40, SK57, SK58 and SK59 (Fig.1). However, the 27 records were of insects not galls (W.A. Ely pers. comm.).

Apion rubens – a curculionid weevil gall on *Rumex acetosella*
This gall was a small bright-red swelling on a leaf mid-rib of Sheep's Sorrel *(Rumex acetosella)* on a small area of sandy ground above the hamlet of Whaw (VC65) (NY989045)

on 12 August 2011. M.G. Morris (1990) describes this species as local but common on Sheep's Sorrel but the YNU Recorder R.J. Marsh tells me that he has never seen the species. This record is the first in VC65 since 1913 and only the second Yorkshire record since 1989. The Yorkshire distribution is illustrated below Fig.2):

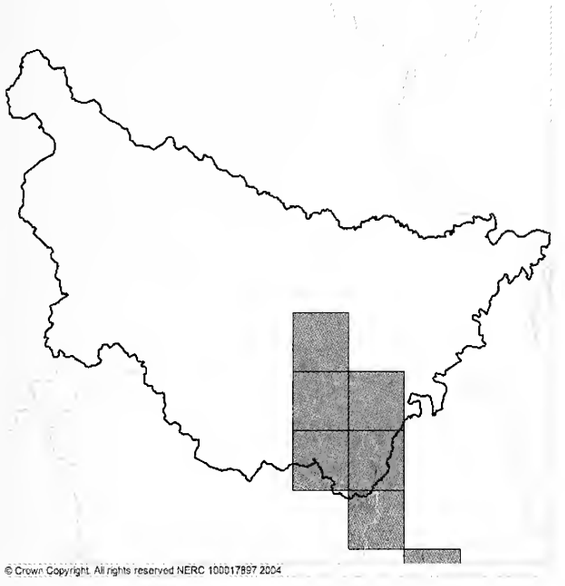

Fig.1 Distribution of *Trioza galii* ©NERC 2011.

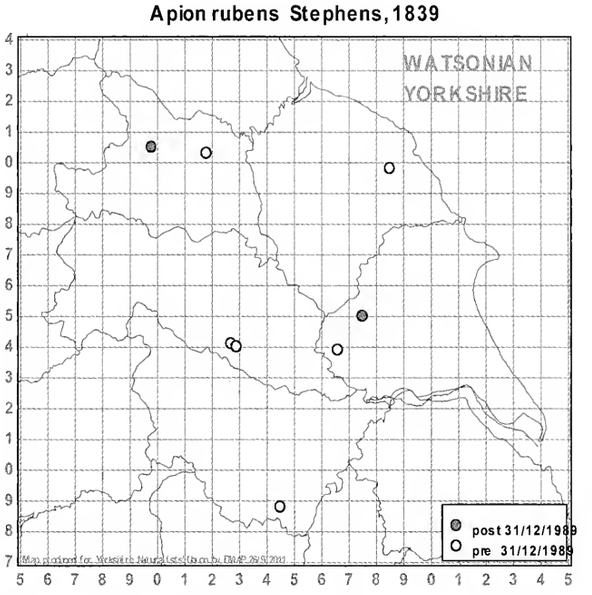

Fig.2 Distribution of *Apion rubens* in Watsonian Yorkshire. The table below lists the records shown. By courtesy of R.J. Marsh.

Date	Location	Grid ref	Recorder
Unknown	Scarborough	TA0488	YNU Report (*Naturalist*)
Unknown	Ravenscar 9802	NZ9802	A.E. Winter
1914	Skipwith	SE6638	W.J. Fordham
Sept 1914	Richmond	NZ1802	G.B. Walsh
March 1922	Blackmoor, Leeds	SE2939	W.D. Hincks
30/08/1964	Fen Bog YWT Reserve	SE8597	John Flint
08/09/1968	Adel Dam (YWT Reserve)	SE2740	John Flint
07/08/1985	Ulley CP, zone G	SK4587	William Ely
23/08/2008	Calley Heath Wilberfoss	SE750497	Bill Dolling
13/08/2011	Whaw	NY9804	John Newbould

Cryptomyzus korschelti an Aphid gall on *Ribes alpinum*

This gall (see Plate VI, centre pages) is a thickened red patch on the leaves of Mountain Currant *(Ribes alpinum)* – a species long known from the Cistercian Abbeys of Fountains in VC64 and Roche in VC63. The gall was recorded at Fountains Abbey (SE279684) on 7 May 2011. There are just three dots on the NBN Gateway including Roche Abbey and the RHS gardens at Wisley. The third square is from north-west Wales. However, the late John Pearson also recorded this gall at Richmond, North Yorkshire, by the River Swale (NZ17011988). The distribution of this species is limited by the small distribution of the host plant (T. Higginbottom pers. comm.)

I am indebted to: R.J. Marsh for information on *Apion,* to W.A. Ely for information on *Trioza,* to Janet Boyd, the British Plant Gall Society data manager, and to Tom Higginbottom for confirming the identification of the *Aceria* gall. He also comments that, for a variety of reasons, many plant gall records have not yet been made available to the NBN Gateway and distribution maps do not always relate to a species' actual distribution. Is this a project the YNU could fruitfully apply itself to?

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Book review

Fossils of the Whitby Coast - A photographic guide. Dean R Lomax.

ISBN 978-0-9567795-0-2 Siri Scientific Press, Manchester. 2011. £15.00.

Many collection managers in charge of scientific collections in museums across the country will have fossil material labelled 'Whitby' or 'Yorkshire Coast'. One cannot expect generalists to be able to identify the provenance of the specimens but, with this simply illustrated, well written and beautifully photographed guide by Dean Lomax, they can at least make a reasonable attempt. "Whitby is a fossil hunter's paradise", to use a phrase from the book, and this publication is one for amateurs and professionals, those who are not familiar with the coastal exposures to the north and south of Whitby, and those that are. Over 200 full colour and high quality photographs and illustrations are the basis of this guide which opens with plain English statements on aspects of field safety and the use of equipment. There follows twelve pages describing the geology of the coast in detail and, importantly in a fossil guide, the nine best localities with their accessibility, geology, find-frequency and type of fossil. The bulk of the guide is devoted to the main fossil groups. Each has a line drawing naming the parts or a reconstruction drawing of the animal or both. The quality of the photographs is excellent with museum collections raided to populate the sections, and the descriptions are short and to the point. There is a short glossary and a good list for further reading; a must for the library shelf of all naturalists who work along the Yorkshire Coast.

MS

Botanical Report for 2011

Phyl Abbott

The very cold weather of winter 2010-11 and the warm, dry period in April had a noticeable effect on many plants. Some flowered prolifically, e.g., White Clover *Trifolium repens*, Selfheal *Prunella vulgaris*, Meadow Crane's-bill *Geranium pratense*, Upright Hedge-parsley *Torilis japonica*, Devil's-bit Scabious *Succisa pratensis* and Rosebay Willowherb *Chamerion angustifolium*. Several grasses grew much taller than usual and the dry spell caused patches of die-back in several trees and shrubs. In September many of the trees at first gave the impression that they would produce wonderful autumn colour but the extremely hot, dry weather at the end of the month caused the leaves to dry and go brown instead and they were soon blown off.

Until some twenty years ago the Northern Felwort *Gentianella amarella* ssp. *septentrionalis* was believed to be restricted in Britain to northern Scotland. It has since been found in the Cheviots and in north-west and mid-west Yorkshire. This year it was discovered in Bastow Wood near Grassington and in Duck Street Quarry, Greenhow, which is now its southernmost British site.

The star event of the year must be the appearance of a Lizard Orchid *Himantoglossum hircinum* near Potteric Carr (see Plate VII, centre pages). It was found by T.A.Bailey and C.J.Williams on 17 June. This is only the second Yorkshire record. The first occurred in 1939 in the Pickering district. An account of this occurrence can be seen in *The Naturalist* (1939) pp.309-310. There were no further reports of that plant so we can only hope that this year's plant will reappear.

During their meeting in Roundhay Park, Leeds, in September, members of the Bradford Botany Group were amazed to find several patches of Alpine Cotula *Cotula alpina* in an area of sparse grassland (see Plate VII, centre pages). Until 2009 this plant had been known on only two sites on moorland – Dallow Moor and Kirby Malzeard Moor, where it had been misidentified as *Cotula squalida*, since *C. alpina* was not known to occur in Britain. However, Linda Robinson found it on another site on the same area of moorland and, with the help of *Google*, she identified it as *C. alpina* which, in its native range, is confined to south-east Australia. This identification was confirmed by a botanist at the Australian National Herbarium. Later in 2009 it was also found by Ryedale Naturalists on Ruddland Rigg and they too had identified it as *C. squalida*. When Linda heard of this she visited the site and found that this was also *C. alpina*. Now we have it in Roundhay Park. Keep your eyes open!

The following lists show plants of interest which have been recorded in each of the Yorkshire vice-counties in 2011.

VC61 South-east Yorkshire

All the records from VC61 derive from the YNU's visit to Spurn (TA4115) on18 June 2011.

Apium graveolens	Wild Celery	by the canal	
Carex distans	Distant Sedge	by the canal	
Carex spicata	Spiked Sedge	Walker Butts	det. D.R.Grant
Glaux maritima	Sea Milkwort	Walker Butts	
Hordeum secalinum	Meadow Barley	Well Field	
Juncus gerardii	Saltmarsh Rush	Walker Butts	

Juncus maritimus	Sea Rush	canal		
Ranunculus baudotii	Brackish Water-crowfoot	scrape near Warren Cottage		
Ranunculus sardous	Hairy Buttercup	Walker Butts		

VC62 North-east Yorkshire

Actaea spicata	Baneberry	woodland, Gilling SE6176	G.Smith	25.4.2011 3 plants
Aquilegia vulgaris	Columbine	woodland, Tenterhill End SE7488	G.Smith	23.4.11
Arabis hirsuta	Hairy Rock-cress	woodland edge, Hutton Common SE7088	G.Smith	21.5.2011 small patch
Atropa belladonna	Deadly Nightshade	old quarry, Spaunton SE7186	G.Smith	28.5.2011 several plants
Bromus racemosus	Smooth Brome	meadow, Sinnington Common SE724848	W.Thompson	22.7.2011
Carex digitata	Fingered Sedge	trackside, Cat Scar, Kirkdale SE760866	W.Thompson M.Yates	13.5.2011six clumps
Convallaria majalis	Lily-of-the-valley	woodland, Gilling SE6176	G.Smith	25.4.2011 large patch
Cynoglossum officinale	Hound's-tongue	verge, Hutton Common SE7088	G.Smith	21.5.2011
Dactylorhiza x transiens	D.fuchsii x D. maculata	Sykes House Intake SE668920	V.Jones W.Thompson	20.6.2011 one plant
Daphne laureola	Spurge laurel	woodland Oldstead NZ5300	G.Smith	15.5.2011 many plants
Erophila verna	Spring Whitlow-grass	rocky slope, Hutton Common SE7088	G.Smith	27.3.2011
Euonymus europaeus	Spindle	woodland, Gilling SE6176	G.Smith	25.4.2011
Gagea lutea	Yellow Star-of-Bethlehem	woodland, Kirkdale SE6785	G.Smith	19.3.2011 many w. of river
Gymnadenia borealis	Heath Fragrant-orchid	damp moorland, Sykes House Intake SE667918	V.Jones W.Thompson	20.6.2011 five plants
Helleborus viridis	Green Hellebore	woodland edge, Ashberry SE5784	G.Smith	19.3.2011 many plants
Helianthemum nummularium	Common Rockrose	grass bank, Ellerburn SE8584	G.Smith	5.6.2011
Hordeum secalinum	Meadow Barley	meadows, Sinnington Common SE721845	W.Thompson	28.7.2011
Juncus x diffusus	J.inflexus x J.effusus	Terrington Moor SE682717	V.Jones W.Thompson	7.9.2011 one clump
Lathraea squamaria	Toothwort	woodland, Gilling SE6176	G.Smith	25.4.2011 on Hazel
Ophrys apifera	Bee Orchid	woodland, Ellerburn SE8585	G.Smith	5.6.2011 7+ plants
Ophrys insectifera	Fly Orchid	verge, Hutton Common SE7088	G,Smith	21.5.2011
Ophrys insectifera	Fly Orchid	old quarry, Spaunton SE7286	G.Smith	28.5.2011 several plants

VC63 South-west Yorkshire

Chenopodium bonus-henricus	Good-King-Henry	Low Bradfield SK2691	T.Schofield	
Hieracium argillaceum	Southern Hawkweed	old railway. Old Moor SE426030	D.R.Grant	
Hieracium consociatum	Sociable Hawkweed	Annet Bridge, Low Bradfield SK255917	T.Schofield	
Hieracium consociatum	Sociable Hawkweed	railway viaduct, Conisborough SK533993	D.R.Grant	
Hieracium sabaudum	Autumn Hawkweed	old railway, Wombwell SE394042	T.Schofield	
Hieracium umbellatum	Umbellate Hawkweed	old railway, Broomhill SE416023	T.Schofield	
Ophrys apifera	Bee Orchid	Seventy Acres, Huddersfield SE120110	K.Dyson conf. J.Lucas	
Orobanche minor	Common Broomrape	old railway, Old Moor, Wath-on-Dearne SE4302	T.Schofield	
Rosa mollis	Soft Downy-rose	Millhouse Green SE205206	T.Schofield	
Rubus anisacanthos		Millhouse Green SE205206	D.R.Grant	
Rubus lindebergii		Low Bradfield SK2691	D.R.Grant	
Saponaria officinalis	Soapwort	railway bank, Royston SE3712	D.Proctor	

VC64 Mid-west Yorkshire

Hieracium inaequilaterum	Hawkweed	Pot Scar SD794678	D.R.Grant T.Schofield	7.2011 1st record
Hieracium leyi	Hawkweed	by Buckden Beck SD946775	D.R.Grant T.Schofirld	2011 1st record
Hypopitys monotropa	Yellow Bird's-nest	Scotton Banks, Nidd Gorge SE331580	M.Whorley Last record was 1860	24/07/11
Juncus gerardii	Saltmarsh Rush	Lawsings Brow SD742665	E.F.Greenwood	26.7.2011 2nd record
Orobanche alba	Thyme Broomrape	Dowber Gill, Kettlewell SD978726	Upper Wharfedale F.S.	7.6.2011 2nd record
Potentilla tabernaemontani	Spring Cinquefoil	near Lord's Wood, Settle SD811646	P.M.Canaway	23.4.2011
Tricophorum x foersteri	Deergrass	Malham Tarn Moss SD883671	M.Wilcox	6.6.2011
Utricularia minor	Lesser Bladderwort	Malham Tarn Moss SD883671	M.Wilcox	6.6.2011 2nd record
Viola x contempta	V. tricolor x V. arvensis	field, Kenn els Lane, Wothersome SE393421	D.A.Broughton	

VC65 North-west Yorkshire

Carex vaginata	Sheathed Sedge	flush, Wold Fell SD787844	L.Robinson det.M.Porter	26.6.2011
Circaea x intermedia	Upland Enchanter's-nightshade	derelict garden Hebblethwaite Hall SD6892	D.Dobson, M.Saag, L.Robinson	22.5.2011 last record 1987

Crataegus laevigata var. punicea f.p.	Midland Hawthorn	hedge, Hutton Conyers SE3273	L.Robinson	7.5.2011 1st record
Dactylorhiza incarnata ssp. *pulchella*	Early Marsh-orchid	flush, Locker Tarn SE0091	A.Gendle	6.6.2011 1st record
Dactylorhiza traunsteinerioides	Narrow-leaved Marsh-orchid	flush, Locker Tarn SE001918	A.Gendle K.Walker det. R,Bateman	6.6.2011
Dryopteris cambrensis ssp. *cambrensis*	Narrow Male-fern	Dent Head SD777844	B.Brown M.Canaway	30.7.2011 last record 1987
Gentianella amarella ssp. *septentrionalis*	Autumn Gentian	Lady Hill SD985896	B.Burrow D.Tennant	19.7.2011
Luzula x danica L.multiflora ssp. *multiflora x* ssp. *congesta*	Heath Woodrush	Great Shunner Fell SD843967	B.A.Tregale det. M.Wilcox	20.7.2011 1st record
Rubia peregrina	Wild Madder	near Pinkers pond SE1086	LRobinson M.Saag S.Warwick	17.7.2011 1st record
Salix caprea ssp *sphacelata*	Goat Willow	scars, How Edge NY8602	T.&E.Laurie, L.Robinson	30.5.2011 2nd record
Sorbus rupicola	Rock Whitebeam	White Scar, Downholme SE114992	T.Laurie det. T.Dines	9.6.2011 last record 1985
Symphytum tuberosum	Tuberous Comfrey	riverbank Woden Croft NZ0120	B.&I.Johnson T.Snaith D.McCutcheon	17.4.2011 last record 1970
Tricophorum x foersteri	Deergrass	Tan Hill to Rogan's Seat NY8905	L.Robinson det. .J.Roberts	22.8.2011
Tricophorum x foersteri	Deergrass	Buttertubs Pass SD867956	B.A,Tregale det.M.Wilcox	20.7.2011

Alien Plants

Acaena novae-zelandiae	Pirri-pirri-bur	Fixby, Huddersfield SE1319	M.J.Lucas	VC63
Achillea filipendulina	Fern-leaf Yarrow	gutter, Crossgates TA026837	V.Jones	12.8.2011 VC62
Anemone x hybrida	Japanese Anemone	beside bridleway, Bramhope SE250434	D.Broughton	20.8.2011 VC64
Beta vulgaris ssp. *cicla*	Foliage Beet	pavement edge, Thornaby NZ450176	V.Jones	10.5.2011 VC62
Brunnera macrophylla	Great Forget-me-not	Sun Lane, Burley-in-Wharfedale SE155467	D.Broughton	24.4.2011 VC64
Campanula alliariifolia	Cornish Bellflower	waste ground, Danby Station NZ707084	V.Jones	11.7.2011 VC62
Chaenorhinum origanifolium	Malling Toadflax	base of wall, Myrton-on-Swale SE437665	V.Jones	15.8.2011 VC62
Corydalis solida	Bird-in-a-bush	Pickering Castle SE798846	P.Davis det. W.Thompson	10.4.2011 VC62
Cotula alpina	Alpine Cotula	Roundhay Park, Leeds SE328382	Bradford Botany Group det. P.Abbott	18.9.2011 VC64

Cotula coronopifolia	Buttonweed	Pugneys Country Park SE3218	D.Proctor	VC63
Crassula helmsii	New Zealand Pigmyweed	Pinkers Pond SE1086	L.Robinson M.Saag S.Warwick	17.7.2011 VC65
Crocosmia "Lucifer"	Montbretia	The Billing, Rawdon SE217398	D.Broughton	23.7.2011 VC64
Digitalis lutea	Straw Foxglove	pavement edge, Hilton NZ466112	V.Jones	19.4.2011 VC62
Doronicum x excelsum	Harpur-Crewe's Leopard's-bane	rocky bank, Gillamoor SE694901	V.Jones	9.5.2011 VC62
Geranium x monacense	Munich Crane's-bill	Engine Fields, Yeadon SE205410	D.Broughton	26.4.2011 VC64
Geranium phaeum	Dusky Crane's-bill	woodland, Gilling SE5976	G.Smith	8.5.2011 VC62
Helleborus foetidus	Stinking Hellebore	woodland, Oldstead NZ5300	G.Smith	15.5.2011 VC62
Hemerocallis fulva	Orange Day-lily	moorland edge, near Ugthorpe NZ794095	V.Jones	4.7.2011 VC62
Holodiscus discolor	Oceanspray	Ever Bank above Pinkers Pond SE1086	L.Robinson M.Saag S.Warwick	17.7.2011 VC65
Hordeum jubatum	Foxtail Barley	bridge over Swale, West Stonesdale NY886014	L.Robinson	19.8.2011 VC65
Hydrocotyle ranunculoides	Floating Pennywort	Pugneys Country Park SE3218	D.Proctor	VC63
Iris laevigata	Smooth-leaved Iris	pond margin, Yeadon SE218408	D.Broughton	4.6.2011 VC64
Lilium martagon	Martagon Lily	riverside, Helmsley SE6285	G.Smith	9.4.2011 VC62
Lonicera involucrata	Californian Honeysuckle	lane verge south of Ugthorpe NZ796085	V.Jones	4.7.2011 VC62
Nemesia strumosa	Nemesia	Birkby, Huddersfield SE1318	J.Lucas	VC63
Ornithogalum umbellatum ssp. *umbellatum*	Star-of-Bethlehem	by leat, Ayton Mill SE987850	V.Jones	17.5.2011 VC62
Persicaria capitata	Pink-headed Persicaria	base of wall, Marske NZ634220	V.Jones	19.8.2011 VC62
Petasites fragrans	Winter Heliotrope	verge, Rosedale SE707977	Ryedale Naturalists	2.1.2011 VC62
Phacelia tanacetifolia	Phacelia	Lascelles Hall, Huddersfield SE1816	J.Lucas	VC63
Quercus ilex	Evergreen Oak	Silkstone Common SE295048	T.Schofield	VC63
Rosa multiflora	Many-flowered Rose	woodland, West Burton SE017862	L.Robinson	30.7.2011 VC65
Rumex scutatus	French Sorrel	gutter, Beech Drive Kirbymoorside SE690867	W.Thonpson	15.5.2011 VC62
Saxifraga cymbalaria	Celandine Saxifrage	stone wall, Malham Tarn House SD895673	YNU	30.7.2011 VC64
Sedum spurium	Caucasian-stonecrop	stone wall, Malham Tarn House SD892672	YNU	31.7.2011 VC64
Senecio inaequidens	Narrow-leaved Ragwort	Coatham sandbanks Redcar NZ585254	V.Jones	21.7.2011 VC62

Senecio inaequidens	Narrow-leaved Ragwort	felled plantation, Humberstone Bank SE140602	P.Abbott D.Grant	20.8.2011 VC64
Sisyrinchium striatum	Pale Yellow-eyed-grass	dumped material, Sheriff Hutton Industrial Estate SE643656	V.Jones	24.8.2011 VC62
Sutera cordata	Bacopa	base of wall, Marske NZ634221	V.Jones	19.8.2011 VC62
Symphytum bulbosum	Bulbous Comfrey	Bramhope SE247426	N.Fearnley	1.5.2011 VC64
Trachystemon orientalis	Abraham-Isaac-Jacob	Golden Acre Park, Leeds SE268417	Bradford Botany Group	16.4.2011 VC64
Viburnum trilobum	American Guelder-rose	Sun Lane, Burley-in-Wharfedale SE154467	D. Broughton	24.4.2011 VC64

Spider recording in Watsonian Yorkshire during 2011

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Introduction

This represents the first formal annual report for spiders by the author, though recording has been undertaken at various intensities within Yorkshire since 2008. Readers are referred to Wilson (2011a; 2011b) which describes and updates the status of spider recording within Watsonian Yorkshire. A chronological bibliography relating to spider recording in Yorkshire is provided on the YNU website (www.ynu.org.uk/entomology_araneae) and a Yorkshire Spider page is hosted by the national spider recording scheme (http://srs.britishspiders.org.uk/portal.php/p/Yorkshire+Spiders), which includes unpublished reports and other information which is updated on an *ad hoc* basis by the author. Researching the articles located within these webpages will bring the reader up to date with respect to the status of spider recording in Watsonian Yorkshire prior to this article.

Field Work

The author attended three of the five YNU field meetings: Went Ings (VC63), Malham Tarn (VC64) and Gunnerside (VC65). He also received specimens, including those taken by pitfall trapping, as part of the Scarborough Bioblitz but was unable to attend the event himself. The three YNU visits have been reported in a previous edition of *The Naturalist* and are not repeated in any detail here (Henderson and Norris, 2011). I also undertook a single visit to Calley Heath Yorkshire Wildlife Trust Nature Reserve with Roy Crossley and likewise to Skipwith Common National Nature Reserve (NNR) with Dr. Geoff Oxford, where we were joined by Roy Crossley. Sporadic visits were made to Rodley Nature Reserve, Leeds, where studies have been ongoing since 2008, and to other various locations across the county.

Correspondence

As the YNU's Recorder, I receive occasional emails with attached photographs from members of the public enquiring as to the identity of the specimens observed, normally in

their houses. These are typically common species, though not always possible to determine to species level; e.g. *Metellina*, of which there are two or three common and ubiquitous species which are not possible to accurately identify without resort to microscopic features. However, one email proved to be of more interest than most, owing to the specimen being a non-native; not just to Yorkshire but to Europe, being from western North America. This record has been reported in the *Newsletter of the British Arachnological Society* (Wilson, in press) but a summary is provided elsewhere in this article.

The Year in Spiders

A total of 116 species were recorded during 2011 with records from all the five Yorkshire vice-counties. The eastern VCs recorded the most species (VC61: 56 species and VC62: 55 species) whilst the western VCs were relatively less well recorded (VC63: 20 species; VC64: 19 species and VC65: 12 species). This geographic discrepancy is entirely due to the contribution made by Roger Key and Adrian Norris at the Scarborough Bioblitz. Readers can therefore conclude, and they would be correct(!), that my efforts have contributed less than others. This can partly be attributed to personal work commitments and the lack of an intensive study but also, I'd like to think, to a developing collaboration with other recorders which I hope continues in the future.

Despite the reduction in effort during 2011, all the YNU field meetings added new records for their respective hectads (see Table 1), no mean feat given that this included Malham (VC64) which is exceptionally well recorded.

Table 1: Number of new species recorded in Watsonian Yorkshire hectads during 2011.

Hectad	Vice County	New Species	Comments
SD 99	65	4	Gunnerside. YNU field meeting.
SE 36	65	1	Record received from Terry Box.
SD 96	64	1	Malham Tarn area. YNU field meeting. The new species (*Araneus quadratus*) is a common and widespread species across the UK. Its absence from this hectad until now is surprising and is assumed to be a result of low recording effort during the autumnal months or a presumption by recorders that it is common and therefore already recorded.
SE 23	64	4	Collected within Leeds (Kirkstall, Adel and Rodley)
SE 75	64	2	
SE 74	64	7	Calley Heath YWT Reserve
SE 61	62	12	Went Ings SSSI (YNU field meeting)
TA 08	62	25	Recorded during the Scarborough Bioblitz (June 2011). The large number of new species in TA 08 and TA 09 reflects the relatively little recording undertaken in the Scarborough area.
TA 09	62	5	
SE 63	61	3	Skipwith Common NNR. A very well recorded site within a very well recorded hectad (208 species recorded prior to 2011). Thus, to record three new species for the hectad (*Pisaura mirabilis*, *Pardosa palustris* and *Anyphaena accentuata*) during a single visit emphasises the under recording in Yorkshire.
TA 33	61	4	Until 2011 and as reported by Wilson (2011), no collecting had been undertaken in this hectad. A brief foray in August 2011 collected a few common species in what is largely an agricultural landscape.

Furthermore, five species were recorded during the year (see Table 2) that are worthy of specific mention owing to their scarcity within Yorkshire.

Table 2: Notable species recorded in Watsonian Yorkshire during 2011.

Species	Status	Comments
Pholcus phalangioides (Pholcidae)	First record for VC65. Yorkshire is towards the northern edge of this species' range (Harvey *et al.*, 2002) where it is associated with human habitation.	Collected indoors from a building at Langthorpe on the north embankment of the River Ure, which forms the boundary between VC65 and VC64.
Simitidion simile (Theridiidae)	The third and fourth records for VC61 for a relatively scarce Yorkshire spider (< 30 records).	Beaten from bushes at Skipwith Common (SE63) and Calley Heath YWT (SE74), which is the typical habitat for this species (Harvey *et al.*, 2002).
Rugathodes bellicosus (Theridiidae)	A first record for VC65 and only the 8th record for Yorkshire. This is a nationally notable (Nb) species.	Collected from under a pile of rocks by a track just east of Gunnerside as is typical for the species (Harvey *et al.*, 2002).
Clubiona neglecta (Clubionidae)	A first record for VC62 and the third record for VC61 of this scarce Yorkshire spider (7 previous records).	Recorded from Calley Heath YWT and Wheatcroft Hill, Scarborough (TA08), in sparse vegetation as is typical for the species (Harvey *et al.*, 2002).
Ozyptila brevipes (Thomisidae)	The fourth record for VC62 of this scarce Yorkshire spider (11 previous records).	Collected from Scalby Mills, Scarborough (TA09), amongst ruderal vegetation. Only recorded with any frequency from wetland areas (e.g. fens) or by the coast (Harvey *et al.*, 2002).

Scarborough Bioblitz

A total of 54 species were recorded during the Scarborough Bioblitz, which took place over a period of three days in early June 2011. This event has been summarised by Norris, Lightfoot and West (2011). The area prior to the survey was relatively poorly recorded with less than 100 species known from each of the two hectads (TA08 and TA09) covered by the event. As a result of the Bioblitz, TA 08 has now recorded 114 species though TA09 has still only recorded 68 species. Nevertheless, as Table 2 records, two scarce Yorkshire species were recorded; one for each hectad. These events, whilst providing a snapshot of the fauna and flora at any given site are, by definition and necessity, a period of hyperintensive recording and clearly demonstrate that useful data can be obtained as well as raising awareness of many under-recorded or poorly appreciated groups.

Non-Native Species

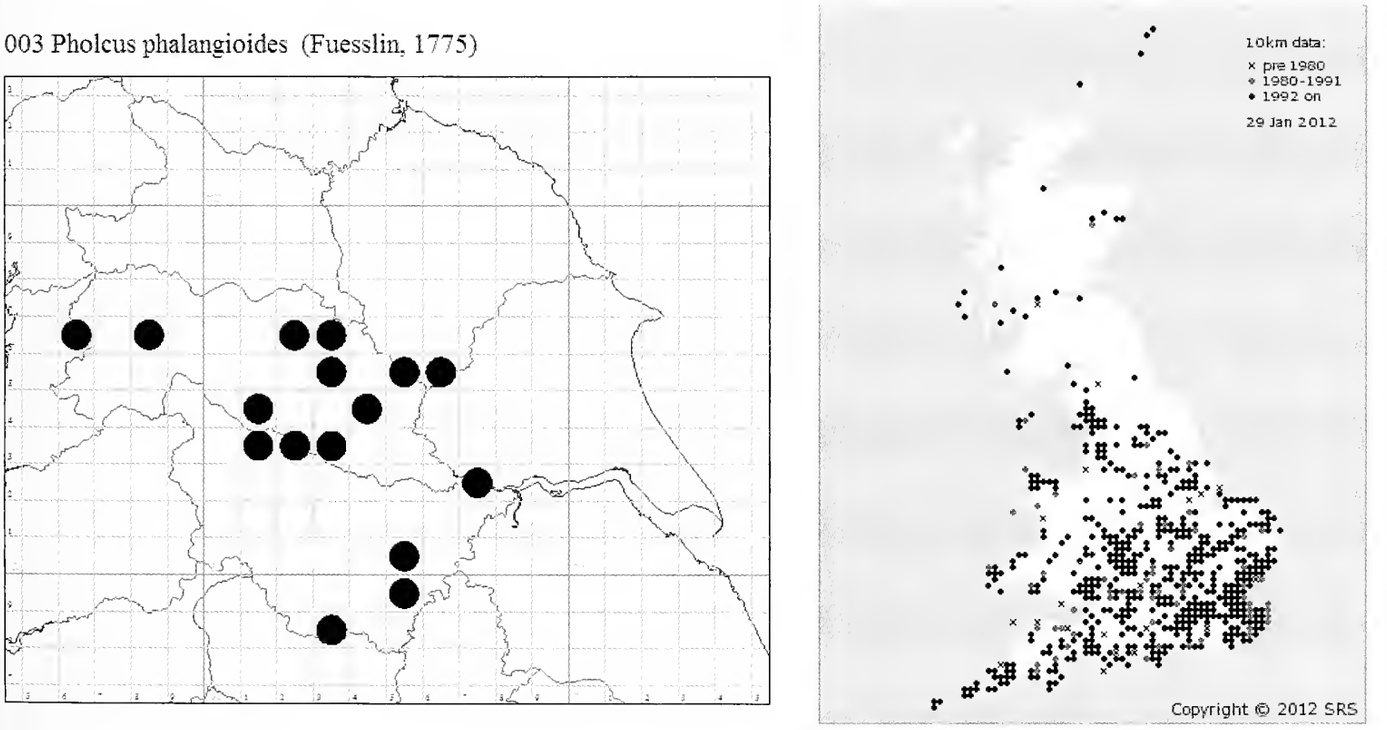
As mentioned in the introduction, I occasionally receive emails from members requesting identification based on attached photographs. One such communication revealed a non-native species that, after investigation, was identified as a North American jumping spider (Salticidae), namely *Phidippus johnstonii*. Whilst in this instance the spider was collected from grapes imported from western USA, other non-native species have established populations in artificial environments such as garden centres and heated greenhouses like those at Tropical World in Roundhay Park, Leeds (Wilson, 2011c). A common and widespread example is the uloborid *Uloborus plumipes*, which has been recorded in all Yorkshire vice-counties except VC65.

Submitting Records

I am always pleased to receive emails and enquiries regarding spiders (and harvestmen) within Watsonian Yorkshire. Whilst it is pleasing that members have emailed me asking for an identification from a photographed specimen, it is much preferred if the specimen itself is available for a reliable determination (assuming it has reached sexual maturity), as only very few species are recognisable from a photograph. For a record to be of value for the national recording scheme, the following minimal data would be expected to accompany the specimen(s): date; name of location (taken from the 1:25,000 or 1:50,000 scale OS map to enable subsequent cross reference); a six-figure grid reference; habitat; and means of collection. I can receive information via Mapmate (identifier: ab1) or through other media (e.g., Excel spreadsheet), though I would ask that any determination which retains a degree of uncertainty should be verified before inclusion. I would, therefore, be more than happy to receive specimens in the post, dead or alive, for verification but I would appreciate prior notice if this will involve large numbers, or if this will be a regular occurrence.

Some of our common species are comparatively scarce in Yorkshire; for example, the Nursery Web Spider *Pisaura mirabilis*, *Araneus quadratus* (as figured in Henderson and Norris (2011; p. 216)) and *Pholcus phalangioides,* the 'daddy long-legs spider' (see Figure 1). The latter's apparent scarcity in VCs 61, 62, 63 and 65 must surely be due to under-recording? (See Plate VIII, centre pages). Yorkshire is a vast county, covering 9% of England. Even with my enthusiasm, I cannot hope to cover the distances involved, so every record counts.

Figure 1: Distribution of the 'daddy long-legs spider' *Pholcus phalangioides* in Yorkshire (left) and nationally (right).



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Henderson A. and Norris A. (compilers). (2011). Yorkshire Naturalists' Union Excursions in 2011. *The Naturalist*, 136, 201 – 225. [Spiders on pp 203 (VC63); 215 – 216 (VC64); and 222 – 223 (VC65)]

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Wilson R. (in press. An American Jumper in Leeds, West Yorkshire and an Update on Non-Native Taxa Recorded in the UK. *Newsletter of the British Arachnological Society*.

Letter to the editors

The recent edition of *The Naturalist* 136 (2011), contains several misleading and inaccurate assessments of some points of Yorkshire's marine biology, not the least of which is the statement on p227, that the local marine environment "has been somewhat neglected since the closure of the marine laboratories in Robin Hoods Bay".

One can surmise that the recently formed Marine and Coastal Section of the YNU will not possess the extensive and historical bank of information that the other, long established, sections have at their disposal, and that members may not be thoroughly conversant with the marine taxa to be found along the Yorkshire coast. All the more reason, therefore, for especial care to be taken in submitting insufficiently researched information and comment for publication in *The Naturalist*, to become, unfortunately, a permanent and untrue written record therein.

Thus an account of the collection of elasmobranch egg-cases at Spurn Point, p208, makes reference to those of the Starry Ray *Amblyraja radiata*, and the reader would infer from that account that it is an uncommon, rare or endangered species on this coast.

In fact, irrespective of the few records of the egg-cases of this species that are on the data-base of the Shark Trust, it is the most abundant ray off the Yorkshire coast and throughout the entire North Sea, and is found within a relatively short distance of the shore. It has never had any commercial value and so suffers little fishing mortality, being constantly thrown overboard during fishing operations, and is not under threat.

While the survey of washed-up egg-cases is an obviously useful tool as a public relations exercise of the Shark Trust, and an activity which its, and indeed YNU members can involve themselves in, it is meaningless and of little scientific value. It reveals more about the local currents and wave actions on the beaches where they are found than anything of the local

status or biology of the species that laid them, nor can it even indicate where egg deposition is taking place.

Another report, on p228, of the nudibranch mollusc *Jorunna tomentosa*, found during the Bioblitz event at Scarborough, states this species to be rare and unrecorded since 1911. This is erroneous, this nudibranch being in fact one of the most common species along the entire NE coast wherever a rocky substrate is to be found, and it may be found on the shore throughout the year.

It is therefore somewhat ironic that, during this same Bioblitz event, various organisations gave exhibitions in the Spa, including a display of the local marine fauna by the Yorks Coast Maritime Archive. Apart from display material covering the Yorkshire cetacea, rare fishes and crustacea, a specific panel was included showing local photographs of the Yorkshire nudibranchiate fauna found over the last fifty years, and including rare species whose occurrence here has drawn interest from molluscan specialists elsewhere in the country, due to their mention on the Archive website. Yet it was noticeable that YNU members of this section, despite being yards away in the same room, did not avail themselves of that unique opportunity to examine the information, gathered over so many years, of the Yorkshire marine fauna!

The only work to date to detail the Yorkshire marine taxa is volume 2 of the *Natural History of the Scarborough District* (1956), since which time a great amount of work has been done. A proposal to update this work as a series of comprehensive publications was initiated by the Scarborough Field Naturalists Society some years ago, and a manuscript for a *Marine Fauna* of the coast, originally proposed to be the first of the series, began to be prepared. However, problems within that Society curtailed the publications project; nevertheless, the manuscript for a projected Yorkshire Marine Fauna continues to be expanded and updated.

David E. Whittaker

Response from *The Naturalist* Editorial Board

The articles about the Scarborough Bioblitz and the VC61 Excursion to Spurn that appeared in volume 136 of *The Naturalist* were refereed prior to publication and the Editorial Board did not consider the statements contained therein to be inaccurate.

The field meeting report on p208 does not describe the Starry Skate *Amblyraja radiata* as rare or endangered, neither does it claim that this species is uncommon on the Yorkshire coast. It states that this species is featured on the IUCN Red List, which is correct. It would have been more precise to say that the species is assessed as Critically Endangered in USA waters, Vulnerable in Canadian waters and as Least Concern in the Northeast Atlantic region, but space is limited within a field meeting report and this information is publicly available at www.iucnredlist.org.

Interestingly, the abundance of this species in Yorkshire has been a cause for debate within the pages of *The Naturalist* since at least 1927. A report by W.J.Clarke in volume 52 states: "I have been searching for this pretty little Ray among the heaps of Skates and Rays of various species exposed for sale upon our local fish market. I find it a common fish here and it is rarely that, on looking critically at the heaps, I cannot find several specimens. [...] This species does not occur in the list of Scarborough marine fish made by Mr. Oxley Grabham; nor in those left by the late Mr. Travis and Dr. Murray. There is only a doubtful reference to it

in 'The Vertebrate Fauna of Yorkshire,' where it is referred to as 'one of the rarest of the Raiidae occurring on the coast.'

This and other historical articles from *The Naturalist* about elasmobranchs in Yorkshire were sent to the Shark Trust last year following the collection of elasmobranch egg-cases during the VC61 Excursion.

The report on the Scarborough Bioblitz on p228 states that there are no records of the nudibranch mollusc *Jorunna tomentosa* on the Scarborough coast on the NBN Gateway. This statement is correct and reflects the fact that no such records were in the YNU nor the Conchological Society of Great Britain & Ireland databanks, but readers should not infer from this that the species has not been recorded, merely that the records have not yet been mobilised and made publicly available. One aim of a Bioblitz is to gather, verify and mobilise species records to help fill gaps in the publicly available information on species distribution. This species was mentioned in the article as one example of how the Scarborough Bioblitz achieved this aim. There are established procedures for incorporating records in the appropriate databanks and naturalists are urged to follow them.

In response to your statement that the recently formed Marine and Coastal Section does not possess the extensive and historical bank of information that the other, long-established, sections have at their disposal, we draw your attention to the article by Dr. Colin Howes about the history of marine recording in the YNU, which is featured on page 26 of this issue, and to the bibliography of over 400 articles on marine biology published in *The Naturalist* since 1881, which is available to download from the Marine and Coastal page on the YNU website.

The Editorial Board is unable to comment on whether specific YNU members visited Yorkshire Coast Maritime Archive's display at the Scarborough Bioblitz but would like to reiterate the sincere thanks that were expressed by the authors of the article to Yorkshire Coast Maritime Archive and other participating organisations for supporting this celebratory event.

YNU Notice

Conference Themes

Finding a theme for the annual conference is the joint responsibility in the first instance of the Natural Sciences and the Education Committees. Members are invited to suggest themes for future conferences. Worked up themes with suggestions for speakers and discussion areas would be especially welcome.

Please send your suggestions to either John Bowers or Adrian Norris.

Book Reviews

Members of the British Plant Gall Society have been quite busy in the years leading up to 2011. Not only has the Collins New Naturalist **117** *Plant Galls* by Dr Margaret Redfern appeared, giving an important insight into the gall-causing species, but we also have two new books to aid the identification of plant galls.

Plant Galls, Margaret Redfern, 562pages. Collins New Naturalist Library, 2011. RRP: hard back £50, soft back £30.

As with all books in the New Naturalist series, this is not a guide to the identification of plant galls. What this book aims to do is to complete the work featured in one chapter of *Insect Natural History* by A.D. Imms, published in the same series in 1947. Galls are not only caused by insects but, as the reader will learn, also by fungi, bacteria, viruses, nematodes etc. Not only are galls found on higher plants but also on lichens, mosses and even seaweeds.

Dr Redfern discusses first the nature of galls in general terms and then outlines not only the features of galls but the science and taxonomy behind each gall causer and how it initiates the process of gall formation. The book is very well illustrated with many fine diagrams and many colour plates taken by members of the British Plant Gall Society. If there is one minor niggle for this reader it is the way the production team has laid out the biology text in boxes with a light grey background. If one takes the heading 'Thrips', for example, there are three lines of text about the galls on page 82 with a grey box on page 83 and four more lines of text, followed by three and a quarter more pages of boxed text before we reach the description, leaving that text quite disjointed.

However, the text is beautifully written. Each chapter was checked by Tom Higgingbottom, the YNU Gall Recorder, to ensure that a non-scientist could understand the text, whilst Margaret's husband Robert Cameron has checked the scientific accuracy of this book while working on his own text for a volume on snails. All three are YNU members. This book is allowing me to understand just what is behind the plant gall records I collect and is a worthy advertisement for the British Plant Gall Society, which both Margaret and Tom Higginbottom have supported since its inception in 1985. This is an excellent book written by one of our members and published in our 150th year. The review copy sent by Harper Collins has been deposited in the YNU library.

Britain's Plant Galls – a photographic guide, Michael Chinery. WildGuides Ltd., Old Basing, Hampshire. RRP £10 - £14.

This book is excellent for people new to recording plant galls. It opens with a very brief introduction to what galls are and what causes them. The book is split into three sections: oak galls, galls on other trees and shrubs and galls on herbaceous plants. Each species is given a reasonable proportion of a page and is separated from the next by a line. Each species not only has text but one or more photographs to assist identification. The beauty of this approach is that even a gall recorder who is experienced is able to see previously overlooked species. For example, I do not recall seeing *Dysaphis crataegi* on Hawthorn, but I will be looking carefully for this bright red gall on the leaf next year.

The section on galls on herbaceous plants is very useful. Many of these are easily overlooked. For example, recently a small group of us were surveying wood pasture at the National Trust's Ringmoor and Turnworth property, when one member of the group found the gall *Dasineura helianthemi* on Rockrose. None of us had seen the species before and we could quickly confirm the identification. One disappointment is that there is no photograph of the gall *Trioza crithmi* on Rock Samphire. Bill Ely and I spent quite some time looking for this at the tip of Portland Bill in a gale in mid-October.

British Plant Galls, Margaret Redfern and Peter Shirley, 432 pages, Field Studies Council Aid Gap series, 2011, RRP £28 plus £3 p & p from FSC.

Originally published in 2002 as a 324-page field guide measuring 240 x 175mm, this essential guide to recording plant galls is now 432 pages. With the new book weighing 1.14k, my old book is still going out in the field, unless transport is very close.

The identification keys are based on first identifying the host plant species. The new work differs from the 1st edition where fungal galls were separated from those caused by insects. In the new work, all galls are listed under the host. Once again each species may be keyed from the host plant with the gall causer often illustrated with line drawings by Michael Bloxham. There are numerous name changes as new work in the intervening years has resulted in more precise identification of the gall causers. For example, the gall *Cecidophyes galii* is not now considered to be present in Britain and the gall previously assigned to it is caused by *Cecidophyes rouhollahi,* although the galls of the two species are identical. The mites, therefore, need to be identified by an expert. In managing my Excel database of plant galls, I do not make changes without both books being available in order to trace the derivatives.

The book has eight pages of colour illustrations at the end. Using both these identification books together is an excellent way forward for a cecidologist.

JAN

The South Yorkshire Plant Atlas edited by G.T.D.Wilmore, J. Lunn & J.S. Rodwell Pp. 450, numerous colour plates and maps. Yorkshire Naturalists' Union, Yorkshire & the Humber Ecological Data Trust, 2011, £47.

Six introductory chapters give an insight into the factors which affect the flora of South Yorkshire. Geoff Gaunt gives a detailed account of each of the geological eras which feature in the topography of the county and of the rock and soil types which occur within each.

In his chapter on vegetation John Rodwell describes the landscape and discusses the effects which climate, industry and land management have had on it. He describes each landscape type from the Pennine tops and Gritstone edges in the west to the flood plains and open waters in the east, as well as weedy habitats and wastelands. He uses his National Vegetation Classification system to illustrate the vegetation types and diversity within each area.

Of the 2036 species listed in the book, 45% are believed to be of alien origin. Geoffrey Wilmore describes 13 habitats where non-native species are most likely to occur. In the next

chapter he describes visits to nine 'hot spots' in the county and for each gives an indication of the terrain and the distinctive plants therein. This section is followed by a list of other botanically interesting sites with public access.

In his section on the history of botany in the county, Graeme Coles gives an account of botanists and their South Yorkshire records which he gleaned from numerous publications and archives from the late 16th to the 20th century. He mentions the formation of the local natural history societies and gives first records of plants in the county. A fuller account of this work can be read in his own book *The Story of South Yorkshire Botany*.

Jeff Lunn begins his chapter on conservation by citing the Walton Hall estate as the first nature reserve in the world. He then explains the damage to plant diversity by pollution caused by industry, by the intensification of agriculture and by inappropriate land management. He outlines the 'hierarchy' of protected areas from the internationally recognised through to Local Wildlife Sites. This is followed by a useful list of South Yorkshire's statutory nature conservation sites and nature reserves.

Geoffrey Wilmore has collated the records and written the information which forms the Plant Atlas – the major part of the book. Early records were obtained from literature and archival sources and, from 2002, considerable field work was undertaken, recording species in 1km. square units. Captions give information on all the 2036 species found and the distribution of 900 of the more common ones is shown on coloured maps of the county which also show altitudinal ranges.

Throughout, the book is enhanced by excellent photographs of plants and their habitats and there is also an attractive painting of flowers by Dorothy Bramley. This splendid work is an admirable achievement and will remain a standard reference to the vegetation of South Yorkshire. It really is a magnum opus.

PPA

Ladybirds (Coccinellidae) of Britain and Ireland, Helen E. Roy, Peter M.J. Brown, Robert Frost & Remy L. Poland, 198 pages. FSC Publications, Shrewsbury, 2011. RRP £19.95, ISBN: 978-1-906698-20-1.

Subtitled "An Atlas of the Ladybirds of Britain, Ireland, the Isle of Man and the Channel Islands", this volume is much more than a set of distribution maps but contains information on the recognition, life history and ecology of each species plus information on their predators, parasites and pathogens.

The book starts with a dedication to Professor Michael Majerus, the mentor and inspiration of the authors and many other coccinelophiles for some twenty years. The YNU and our Coleoptera Recorder Bob Marsh are among the long list of organisations and individuals acknowledged for their contributions to the UK Ladybird Survey. The introductory chapters on ladybird recognition, ecology and recording include, not surprisingly, the story of the Harlequin Ladybird in Britain. As an aside, I find it strange that the UK Ladybird Survey and the Harlequin Ladybird Survey are capitalised whereas the species are referred to as 'eyed ladybird' and 'harlequin ladybird'.

Each species account includes a distribution map, one or more photographs of the adult insect and often a photograph of the larva and the pupa. At the end is a short section entitled "Occasional species and potential new arrivals". *Exochomus nigromaculatus* is included here although the authors quote more records for it than for a couple of the species for which they provide a full account. I have an issue with this as the first modern British record, after an absence of a century and a third, was made by Peter Skidmore at Rossington Bridge. The distribution maps show records in three time periods – before 1990, after 1990 and both before and after 1990. This makes it very easy to see where a species is spreading or retreating or maintaining its status, which is very helpful. The choice of red, black and grey on white paper seems very appropriate for many ladybirds and the distribution map of the Seven-spot Ladybird looks like a Salvador Dali impression of the insect!

At the end of the introductory chapters are two maps illustrating the number of records and the numbers of species from each 10km square. There are clearly great discrepancies in coverage with Devon, Dorset, much of Wales, Lincolnshire, Lancashire and nearly all points north and west of Yorkshire, including Ireland, being poorly represented. So how did we do? South Yorkshire, Ripon, York and Hull are in the top group (100+ records) while much of central Yorkshire and Holderness have 21-100 records. VC62 and the area of VC64 and VC65 west of Keighley and Ripon are mainly less well recorded though the line from Helmsley to Scarborough and Whitby plus Malham Tarn are well-recorded. The hectads SE60, SE70 and SE74 are the only ones in Yorkshire with 25+ species while the squares in the more peripheral areas in the west, north and east have only single figures. We have to thank Bob Marsh for maintaining our reputation but there are still large parts of the county that should be better recorded. Distribution maps such as this may be helpful in pointing us to areas for field meetings which would help to balance out the records.

WAE

YNU Notice

Lepidoptera section's new website

The YNU Lepidoptera group has launched a new website - www.yorkshiremoths.info

To quote from the site's home page, "We hope that this site will act as a central hub for information about moths in the county, with links to other sites of interest. One of the main purposes of setting up the site is to make accurate distribution maps for each species available for the first time on-line. This has been possible through the use of MapMate® software and our ever-expanding database of records, currently with 1,486,927 records uploaded so far!"

Obituaries

Eric Thompson 1920-2011

In the early 1960s the YNU held a meeting at Gunthwaite near Barnsley. Tom Schofield and I attended this meeting with a group of local naturalists. Here we were introduced to Eric, who was showing members a snail, the Two-toothed Door Snail *Clausilia bidentata*, living in the moss on a sandstone wall. This snail is very rare here as it is a species that lives in limestone areas rather than the acidic Coal Measures. It was from this meeting that we formed a friendship that has lasted 48 years.

Eric was born in Batley, where he spent his early life. He later married and moved to Dewsbury, where he spent the rest of his life in various parts of the town. He worked in the Textile Mills for much of his life, finally ending at an engineering works in Heckmondwike. Unfortunately his wife died at a very young age.

Eric took early retirement at 60, so he could spend more time outdoors. He was very interested in mosses and, together with George Shaw, Mary Dalby and Fred Branson, formed the nucleus of the YNU Bryological Section during the 1960s, '70s and '80s. His other main interests were conchology and botany, but he touched on many other groups. He was a strong supporter of local societies, being a founder of the Mirfield Naturalists' Society and, during its flourishing period (1960-1970), he became President. Alas! like many such societies, MNS does not exist today.

Eric was an accomplished speaker who, throughout his life, lectured to numerous organisations in the West Yorkshire conurbation on various aspects of natural history, holding an audience's attention particularly by introducing several lively anecdotes, frequently humorous enough to arouse loud laughter.

Eric was a keen conservationist and assisted Bob Dickens and Dr Douglas Pickup in the early work at Fairburn Ings which, in due course, became an RSPB reserve. Through his contacts with local landowners, Eric was able to assist the YWT in obtaining Stocksmoor Common (at Midgley, near Wakefield) and Sherburn Willows (at Sherburn-in-Elmet) as Nature Reserves. He spent many weekends at Sherburn Willows clearing hawthorn scrub. Although not at all a 'mountain man' or Dales person, Eric enjoyed travelling about, his favourite areas being the Kingdom of Elmete and Norfolk.

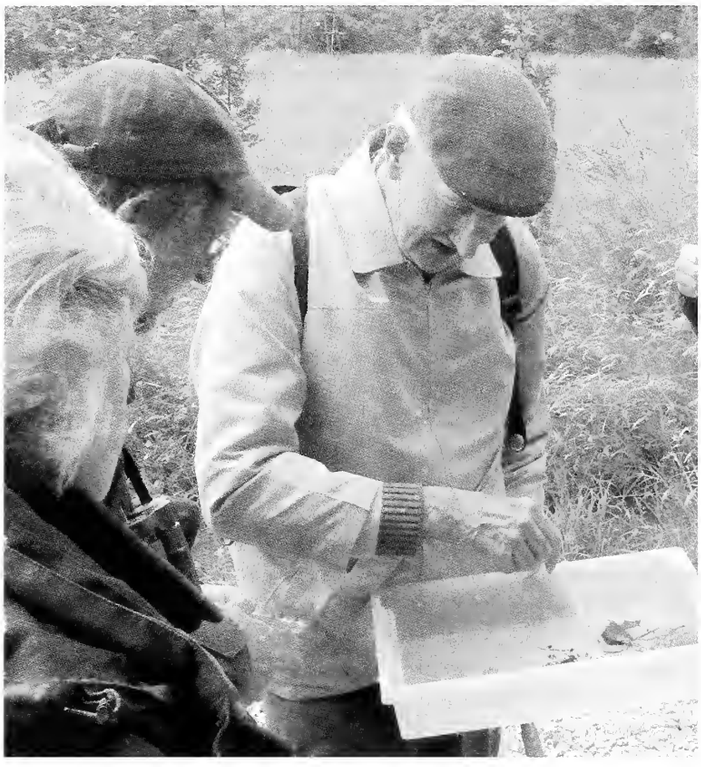
His library of several hundred books and many runs of journals was extensive. When I moved to Ossett in 1975, I joined Eric's Tuesday Evening Club, where several naturalists would meet at his home to discuss the week's excursions. Here his books were of real value to us; with the help of his library most problems were solved. At times we even seemed to sort out the world! In later years, unable to walk very far, he used to sit in the car during the afternoon, watching Nature around him and the richness "of things being various". Then at tea-time he would tell us of the things he had observed.

Eric passed away peacefully at the Fieldhead Court Nursing Home, Thornhill, Dewsbury, on 6 September, 2011. With his demise Yorkshire has lost a great field naturalist, who will be missed by his many friends throughout the county.

D.R.Grant

Donald Henry Smith 1927-2011

Don was born in Kingston upon Hull, where his family ran the Anlaby Road post office-cum-shop and was educated at Riley Hall School and Hull Technical College. An innate inquisitiveness and an insatiable curiosity about the world and the creatures in it led him to join the Hull Scientific Society and Field Naturalists' Club at the age of 14, where the President, Harry Foster, an ex-headmaster, encouraged his early ventures into the wonders of microscopy. By natural inclination he concentrated on entomology and, in days when the collection of specimens was in no ways an issue, he began to amass a large insect reference collection.



At the age of 16 he became a pathology laboratory assistant at Beverley Base Hospital, entering the forensic territory of staining blood smears, estimating blood sugar and many other tests and activities he found rather gruesome at times. After a couple of years he took employment as an industrial chemist at British Cod Liver Oil Producers, soon becoming Works Chemist but later moving to Hangar's Paints at Stoneferry, Hull, as Senior Technologist.

1954 saw a considerable change. Having taken the Teacher Training Certificate at St John's College, York, Don began teaching: Physics, Maths, General Science, Technical Drawing and Metalwork. During this period, too, he was invited by Bruce Campbell, Chairman of the Council for Nature and former Head of the BBC Natural History Unit, to join the Council. While there he wrote the Invertebrates section of its *Handbook for Naturalists*. In 1957 he became Honorary Secretary of the British Junior Naturalists' Association and was instrumental in its purchase of Newton House at Falling Foss and in its later establishment of a Field Centre in the Old Rectory, Hutton Buscel. When running this became too onerous for the volunteer management, the sales proceeds were invested to provide annual grants for young naturalists, a system which continued as the Yorkshire Field Studies Trust.

He moved to Ryedale School in 1966, settling in Kirkbymoorside, where he became a Town Councillor, school governor and Chairman of the Ryedale Sports Council, obtaining the hefty grant necessary for the sports community to build a 6-rink bowling green and pavilion. He had also become a Fellow of the Royal Entomological Society, arising from his work at the British Museum of Natural History while conveying many collections to Hull Museum as replacement for those lost during the intensive wartime air-raids. Over these years he conducted many surveys of YWT nature reserves, serving on the management committees of Bridestones, Burton Rigg, Fen Bog and Jeffry Bog, and as chairman of Ellerburn Bank NR. Also, as a member for some forty-five years of the Ryedale Field Naturalists, Don was the society's leading technocrat, beginning the computerisation of their record-keeping as early as 1983, acting as projectionist, giving generously of his knowledge of the intricacies of the camera, lecturing and making a permanent contribution to the society's written deposit; in short, being the 'compleat naturalist'. Don left teaching before retirement age, “disillusioned”, in his own words, “with bells, buzzers, headmasters and interfering county hall officers”; a judgement not untypical of someone who cherished order but detested red

tape. When in 2003 he and his wife moved to a smaller house in Kirkbymoorside, his entomological reference collection of over 15,500 specimens representing over 6,000 species was passed to Tony Harman in Canterbury.

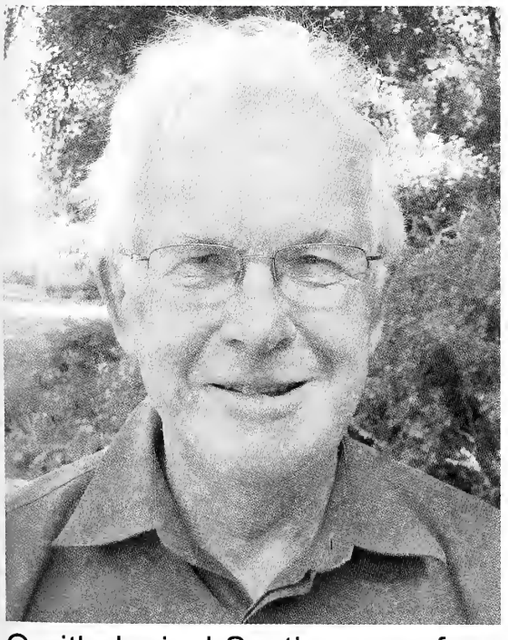
In 1982 he had courted yet a new love, joining the British Lichen Society and soon becoming its Yorkshire and Lancashire representative for the Churchyard Group and Upland England co-ordinator. In the course of surveying over 1500 churchyards from Lincolnshire to southern Scotland and carrying out surveys of numerous castles and abbeys for English Heritage, along with surveys of Forge Valley for English Nature, of Dalby Forest for Forest Enterprise, and fieldwork at many other sites, he assembled a large reference collection of lichens now held in the Yorkshire Museum. Don and I did considerable fieldwork together over this time in the large area covered by the two-volume *Natural History of the Scarborough District (1953-1956)* and, like other lichenologist friends, I have many happy memories of what was a golden period for him.

After fighting illness for some years, Don passed away peacefully at home. He is survived by his wife, Jean, a son and daughter and seven grandchildren.

Albert Henderson

Michael J.A. Thompson M.B., M.Phil., F.L.S. 1933-2011

Michael Thompson was born in Haifa, in the former British Mandate of Palestine, where his father was Medical Officer to the Palestine Railway and his mother a nurse at the hospital in Haifa. To avoid hostilities during the Second World War, he was evacuated with his sister and mother via Egypt. His school days were spent at the Friends' School, Sidcot, in the Mendip Hills in Somerset, and it was here that his already well developed interest in natural history was fostered, particularly in insect and pond life. His parents moved to Tripoli in Lebanon in 1948, where his father worked as a surgeon, so Michael had the opportunity to travel widely in the Near and Middle East while visiting his parents during the school holidays. He became fascinated by the region, its inhabitants and particularly its wildlife and collected insects for his school museum in Sidcot. This similarity with his contemporary Gerald Durrell is not misplaced since, during his last family visit in 1955, he collected reptiles and amphibians on behalf of the Herpetology Department of the Natural History Museum.



Michael studied medicine at King's College, London and King's College Hospital, qualifying in 1958. During his days as a medical student he became a keen ornithologist, watching the waterfowl on London's reservoirs. In 1960 he registered as a conscientious objector, serving out his alternative National Service working at 'The Retreat', the Friend's psychiatric hospital in York. Settling in York, he entered general practice in 1962 where he stayed until his retirement in 1993. Through his career as a medical practitioner in York, he served as President of the York Medical Society and was Chairman of Governors of the 'Retreat' psychiatric hospital.

Michael was elected to the Committee of the Mammals and Lower Vertebrates Section in 1970, when this and the Ornithological Section were formed from the old YNU Vertebrate Section and he became the Recorder for Reptiles and Amphibians, continuing in this role until 1977. He instigated the

10km recording scheme for Yorkshire herptiles, enabling our region to be well represented in the *Atlas of amphibians and reptiles of the British Isles* (Arnold 1995).

From 1964 to 1981 Michael resided in the village of Skelton and, knowing of the historical and wildlife surveys of the Skelton and Overton parishes undertaken by the Bootham School Natural History Society and published in 1956, he and Canon Henry Stapleton updated and republished this study (Stapleton & Thompson 1971). Significantly, the group of friends which Michael assembled to undertake the small mammal surveys for this work formed the basis of what was to become the Yorkshire Mammal Group (Wakelin 1990, Thompson 2001). Small mammal trapping became a staple activity of this remarkably energetic group, with the published results of their long-term trapping project at Howsham Wood standing as a model of the recording and interpretation of these extremely labour-intensive exercises (Aspinall & Thompson 1973). Subsequently, Michael published the results of at least 16 YMG trapping projects. During the 1970s and '80s Michael was a major contributor to the YNU mammal mapping scheme (Howes 1983, Delany 1985) and his recent recordings have contributed significantly to the computer-mapping of terrestrial mammal distributions in North Yorkshire 1996-2006 (Oxford *et al.,* 2007), a project he helped to instigate.

Serious bat studies commenced in 1974 and by 1977 Pipistrelle ringing in and around York had commenced under the guidance of Dr Bob Stebbings (then of the Nature Conservancy Council) and with the enthusiastic assistance of York-based members of the Yorkshire Mammal Group, notably Sheila Walsh, Edna Shann and Lesley Helliwell (Thompson 1977, 2001). Michael's expertise in this field became nationally recognised and he was invited to contribute the entire bat section in *The RSPCA Book of British Mammals* (Boyle 1981) and species reviews on Whiskered, Brandt's, Natterer's, Daubenton's, Serotine, Pipistrelle (then considered a single species) and Brown Long-eared bats in *Yorkshire Mammals* (Delany 1985). In studying a colony of Brown Long-eared bats at Skelton, Michael examined the numbers and species range of moths brought back as prey items. Instead of merely identifying and quantifying these remains, he ran a moth trap in order to investigate which of the seasonally available moths were being preferentially harvested by the bats (Thompson 1982). A programme of work based on the extensive York Pipistrelle nursery roost study led to Michael obtaining a well-earned MPhil degree in bat biology from the University of York (Thompson 1984, 1986a). His most significant bat biology research appeared in his papers 'Longevity and survival of female pipistrelle bats in the Vale of York, England' and 'Roost philopatry in female pipistrelle bats' in the *Journal of Zoology* (Thompson 1987, 1992). In addition to generating a wealth of original data on bat biology, ecology and behaviour, these York-based studies brought together and trained a generation of key Yorkshire bat workers and led to the formation of the North Yorkshire Bat Group.

Michael was elected a fellow of the Linnean Society in 1984 and became an honorary Research Associate of the Department of Biology at the University of York. In 1988/89 Michael was particularly proud to be honoured with the Presidency of the Yorkshire Naturalists' Union (Thompson 1989), his presidential address 'The pipistrelle bat *Pipistrellus pipistrellus* on the Vale of York' (Thompson 1990) being a summation of his, by now, very extensive bat biology research.

From the 1960s Michael had been a keen supporter of the Yorkshire Wildlife Trust, at various times serving as Reserves Officer, Chairman of the North West Yorkshire (VC65) Group and Chairman of Skipwith Common Nature Reserve. For many years he served on the Trust's Council and was Vice President from 1984 to 1986. He was an active member of the Mammal Society, serving on its council from 1983 to 1986.

Like so many influential Yorkshire naturalists, Michael was a lifelong Quaker, in his later life serving on the Quaker Peace and Service Central Committee and its functional committee, the World Regional Programme. He was also an Elder of the Malton Meeting, North Yorkshire. Stemming from his childhood contacts with the Near and Middle East, Michael travelled in the service of Quakers in his retirement, helping to organise study tours to Quaker communities in Lebanon and Ramallah on the West Bank in 1996 and 1998. An account of his early life in this region and of these later excursions forms the basis of his autobiographical book *Al Mashrek: A Quaker Travel Journal in the Levant* (Thompson 2000).

Michael was a prolific writer, as indicated by the following references (a bibliography of over 120 published works, compiled during the preparation of this tribute, has been deposited in the YNU library). He contributed hugely to Yorkshire natural sciences and wildlife conservation and, in founding the Yorkshire Mammal Group and the North Yorkshire Bat Group, has helped to foster the next generation of informed field naturalists.

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Colin Howes and Geoff Oxford

YNU Excursions 2012

Circular No 875

Divisional Secretary VC64
Terry Whitaker, 4 Crowtrees, Low Bentham, Via Lancaster LA27EE, Tel. 015242 62269, Email t.whitaker1@btinternet.com

The VC64 meeting will be to RSPB Fairburn Ings (LNR) on 19 May 2012. The moths group is invited to trap on the Friday night (18 May) but generators will be needed as there are only power sources from the Visitor Centre.

Maps: 1:50000 Landranger sheet 104; 1:25000 Explorer sheet 289 (Leeds)

Meeting place: Saturday 19 May 2012 at 10:30 at The Visitor Centre, Fairburn Ings.
Park in the main car park at SE452278 off Newton Lane. 'Pay and Display', RSPB members free.

Reporting Meeting: This will be held in the Fairburn Ings Visitor Centre at 16:00. Attendees will be asked to make a contribution to the RSPB. Refreshments can be purchased in the Visitors' Centre.

The Area: Fairburn Ings LNR is situated in the Lower Aire Valley and forms part of Fairburn & Newton Ings SSSI. It lies 1.5 miles (2.5km) west of Fairburn, near Castleford, and is managed by the RSPB on behalf of Leeds City Council.

Lying alongside the River Aire, the 286ha site includes a large mesotrophic lake and a number of smaller water bodies providing habitats with a focus mainly on wildfowl and waders and many other birds. The area has been the scene of industrial and mining operations for 150 years and most of the larger water bodies are 'flashes', the result of subsidence of former coalmine workings up to half a kilometre underground. The site is bordered by predominantly arable farmland to the north and industrial and urban environments to the south and west. One third of the site has been developed from 26 million cubic metres of colliery spoil which have been landscaped to create a large complex of habitats to include herb-rich grassland, flood meadows, wet fenland, marsh and reed bed, woodland and scrub. Some of the edges of the River Aire are old grassland.

The site has long been recognised as nationally important for wildfowl. BAP species include: Grey Partridge, Turtle Dove, Skylark, Song Thrush, Tree Sparrow, Linnet, Bullfinch, Reed Bunting, Corn Bunting. The reserve has the highest number of bird species recorded at any site in the county (274). During the winter months, Fairburn provides an important refuge for Whooper Swans from Iceland, Shoveler Ducks from eastern Europe and a range of other species such as Pochard, Coot and Golden Plover. The reserve is also important for both wintering and breeding Gadwall. Other notable breeding species include the Reed Warbler, which breeds within the reserve's extensive reed beds, and the Common Tern and Little Ringed Plover, which prefer to breed on shingle or stony ground. Access to some areas may be limited to prevent disturbance to these nesting birds. Water Vole and Pipistrelle are known to be present.

Apart from the birds and butterflies; most other groups are not recorded in detail. The plants and animals of the great variety of habitats, especially the extensive scrub, newly developing grassland and long established wetlands should be fascinating to record.

Hazards of the area: Deep water is present in many areas and there are often steep banks adjacent to the water bodies and the River Aire. Any children in the party must be closely supervised by a parent or guardian at all times.

Previous YNU Visits: June 1934 (Excursion No. 383) Reports: *Naturalist Suppl.* (1934) **59**: 211-213.

Circular No 876

Divisional Secretary VC 65
Terry Whitaker; 4 Crowtrees, Low Bentham Via Lancaster LA27EE, Telephone 015242 62269 Email: t.whitaker1@btinternet.com

The VC65 meeting will be to Foxglove Covert LNR on 16 June 2012. The moths group is invited to trap on the Friday night (15 June) but generators will be needed as there are only power sources at the Field Centre.
Maps: 1:50000 Landranger sheet 99; 1:25000 Explorer sheet 302
A detailed location map is available as a .pdf file through the website:
http://www.foxglovecovert.org.uk/images/uploads/Foxglove_LNR_Map.pdf

Meeting Place: Foxglove Covert LNR is four miles from the A1 in Catterick Garrison near Richmond, North Yorkshire. The postcode for satellite navigation is DL9 3PZ.

Note. The site is situated within a military facility; you will need to pick up a visitors pass at the main entrance on Ava Road (SE165975). Vehicle drivers are advised to bring some form of photo ID, such as driving licence. You may be asked to produce it. Parking is then within the site at SE163974. Meet here at 10:00.

Reporting Meeting: Will be held in the Field Centre at 16:00. There is no site cafe but we will make tea and coffee in the kitchen of the field centre. Attendees will be asked to make a proportionate contribution to cover refreshment costs and to make a donation to the NR of about £2.50 per person.

The Area: In September 1992, with financial assistance and personnel from the Royal Scots Dragoon Guards recently returned from active service in what has since become known as the First Gulf War, a small conservation area was established behind Cambrai Lines, Catterick Garrison. This 94ha reserve was taken in from part of the military training area. In April 2001 the area now known as Foxglove Covert was declared a Site of Local Nature Conservation Importance (SLNCI) in Richmondshire District Council Local Plan. It was the first LNR in Richmondshire, North Yorkshire and the first on Ministry of Defence land in the UK. The site is managed in such a way as to retain and enhance the varied habitats but also to allow the local community to enjoy and appreciate it, with a strong emphasis on education at all levels and a small field centre was constructed to enhance teaching facilities.

The site has a reputation as a rich wildlife habitat and for excellence in bird ringing. This is a well-wooded site with woodland of all types (scrub, deciduous, coniferous, mixed & willow carr). Part of the old deciduous woodland is managed by coppicing. The willow carr ('carr' is an old Norse word for swamp) is the largest such area in Swaledale and is managed by coppicing. The willow is regularly cut down to form open glades and rides which give warm, sheltered areas good for many insects, especially butterflies. The willow carr is home to numerous birds and the ringing scheme has shown that individual birds have returned here as many as eight years.

Grassland is scattered throughout the reserve as various small meadows, each one having its own unique flora. The meadow behind the Scrapes is dominated in late July by Pepper Saxifrage, Tormentil, Knapweed and Devil's Bit Scabious. Others have patchworks of Betony, Hedge Woundwort, Marsh Valerian and many grasses. They have an abundance of butterflies, hoverflies, bees, spiders and beetles. There are small areas of fen with several spring-fed pools and areas with *Sphagnum* moss, Grass of Parnassus, Common Spotted Orchid and the insectivorous Butterwort.

A small area of heath in the southeast is rich in plant and insect species including Common Spotted Orchids and Wasp Beetles. Day flying, red and black, Narrow-bordered Five-spot Burnet moths are found here. Nightjar and Woodcock have bred here in summer, also Great-crested Newts.

The site contains several ponds and lakes, the largest is in the northern part. Their edges are rich in flowers such as Flag Iris, *Mimulus,* Water Forget-me-not and Spearwort and there are reed beds, which are home to Moorhen, Grey Heron and Reed Bunting. Water Vole also occurs here. A series of interconnected ponds was created in 1993 with platforms for use for pond-dipping to catch such creatures as Water Scorpion, Great Diving Beetle, pond skaters and leeches. Roe Deer can be seen in the woodland, especially the Larch plantation towards the northern boundary.

Hazards of the area: There is always risk from tripping and falling. Please take reasonable care at all times, and wear appropriate clothing. Any children in the party must be supervised by a parent or guardian at all times and especially near to the two designated pond-dipping platforms.

Previous YNU Visits: August 1995: Circular (Excursion No. 794): *YNU Bull.* (1995) 23, 45. Reports: *The Naturalist* (2000) 125, 184-186.

Circular No. 877

Divisional Secretary VC61
Sarah White, Yonder Cottage, Ashford Hill, Thatcham, Berkshire, RG19 8AX.
Tel: 01635 268442; Email: sarahpriest656@btinternet.com

The VC61 Meeting will be held on Saturday 7 July at Tophill Low.

Maps: 1:50 000 Landranger Sheet 107 Kingston upon Hull 1:25 000 Explorer Sheet: 295 Bridlington, Driffield and Hornsea

Meeting Place: We will meet at 10:30 in the car park of the Tophill Low Nature Reserve, TA072484, adjacent to the pumping station. Access is from the A164 Beverley to Driffield road, turning east at Watton, where signposted, along the minor road to the reserve.

At 10:30 Richard Hampshire, the reserve warden, will give us a brief introduction and will suggest options for fieldwork. There is an admission charge of £2.80 for adults and £1.20 for concessions. Toilets are available.

Tea and Meeting: This will be at 16:30 at the reserve. Their wildlife centre is due for replacement at around this time but Richard is kindly making provision for us to meet in one of the other reserve buildings.

The Area: Tophill Low is a Yorkshire Water Treatment Works situated in a 300 acre site adjacent to the River Hull. It opened as a nature reserve in 1993 and comprises two large reservoirs surrounded by an intricate mosaic of marshes, ponds, grasslands and woodlands. The reservoirs have SSSI status for their wintering wildfowl populations and the river is important as the most northerly expression of a chalk stream. The habitats surrounding the reservoirs are also of significance for their plants and invertebrates, the whole reserve creating an oasis in this intensively farmed area of the Hull valley. The last YNU Excursion to Tophill Low was in 1979.

Yorkshire Water manages the site actively to enhance its wildlife interest, and its new wetland project at Hempholme is likely to have been completed by the time of our visit. Access to most of the reserve is via easy paths and there are a number of hides. Richard has offered to make species lists available to us in advance of our visit (please do email me if you would like more information before the day).

Reference:
Annual reports are produced by the Hull Valley Wildlife Group: the most recent is for 2010. (www.hullvalleywildlifegroup.co.uk)

Circular No 878

Divisional Secretary VC62
Mr Mick Carroll, 10, Crofts Avenue, Pickering, YO18 7HP Tel: 01751 476550
Email: mickcarroll47@btinternet.com

The VC62 meeting will be to The Howls, The Ings & The Carrs on 21st July 2012.

Party leaders: Mick Carroll and Tim Berkinshaw, the Wetlands Officer of Scarborough (Tel: 01723 374079).

Map: 1:50000 Landranger sheet 101 Scarborough and Bridlington area.

Meeting place: Near Haybridge Farm SE979789 on the lane running north from Ganton on the A64.
Reporting Meeting: This will be held in Ganton Village Hall at 16:30.

The Area: The Howls, The Ings and The Carrs are reclaimed land which resulted from the straightening of the River Derwent and Hertford River. Some of the drains have been blocked to form pools whilst other parts are still used for arable crops. The fallow areas left on field margins should result in a number of interesting new finds, as will the rivers and drains and their banks.

The intention is to examine the surroundings of the River Derwent and Hertford River, including the Star Carr area of the upper Derwent. Otter, Water Vole, Brown Hare and Roe Deer are recorded and Avocets were present last year along with Yellow Wagtail and Buzzard. Invertebrates are numerous with a profusion of aquatic plants.

Circular No 879

Divisional Secretary VC63
Joyce Simmons, 16 Springfield Crescent, Kirk Smeaton, Pontefract, WF8 3LE
Tel: 01977 620725 E-mail: joyce@gentian.plus.com

The VC63 excursion will be on Saturday 11 August 2012 to Scammonden Water.

Map: 1:50000 Landranger sheet 110 Sheffield and Huddersfield 1:25000 Explorer sheet OL21 South Pennines.

Meeting Place: Meet at 10:30 in the Yorkshire Water visitor car park overlooking Scammonden Water (SE055163). Leave the M62 at junction 24 and take the A643 westwards. At the next roundabout take the A640 towards Manchester. This crosses the M62 twice, then climbs above the reservoir. Turn second right onto the minor road (O'Cot Lane), then left into Green Slacks Lane leading to Yorkshire Water's Wood Edge car park.

Indoor Meeting: At the Jack o' Mitre pub, which you will pass on the A640 before the turn off for the reservoir. Map reference: SE068162, post code for sat. navs.: HD3 3FW.
We have a booked room in the pub from 3:30 to 5:30pm. The bar will be open and tea and coffee are available. Home-cooked food is served from 5:45pm, and can be prebooked (Tel: 01484 842604).

The area: Scammonden Water is a Yorkshire Water reservoir serving Huddersfield and lying at 250m above sea-level. The dam was completed in 1966 and the landscaping in 1969. Iit is hoped that with 40 years of maturation interesting organisms have colonised the area.

There is a path right round the reservoir and a steep but well-made path leads down to it from the car park. To avoid the steep slope there is a smaller car park at the bottom of the hill, allowing level access to the eastern side of the water.

The path to the west crosses a bog and then climbs towards the heather and Bilberry and typical Millstone Grit flora. Large numbers of trees have been planted of many species such as Alder, oak, Holly, Beech, Mountain Ash and pine to give mixed woodlands. A variety of ferns, including Lemon-scented, grow beside the abundant streams which feed the reservoir. Open areas are mown, grazed or have undisturbed vegetation. The drawdown zone above the reservoir surface is colonised by many species. Those present are dependent on how long ago that area was immersed.

Other footpaths allow access to the surrounding moorland. A footpath leads to the dam of Deanhead reservoir higher up the valley where Twite and Grasshopper Warblers have bred in recent years. The variety of habitats within this upland region should provide interest for all YNU members.

Nearest previous excursions: Deanhead and Morton Wood (June 1990) and Deanhead (June 1951). VC63 excursions in 1936, 1933, 1880 were in the same 10km square.

The Naturalist guide to consistency

General

- Articles will appear in 10pt Arial, with titles at 14pt bold, and authors' names and sub-headings in 10pt bold. Text to be fully justified.
- Authors may choose their style of address and address details, though it is not necessary to include all of: postal address, email and telephone no. (2 items max).
- There should be a line space between paragraphs but no space between sub-heading and paragraph text.
- There should only be a single space after full stops and commas, etc.
- In text, units should immediately follow the number (no space) with no stop after the unit, e.g., 10mm
- Grid references should include the 100km square letters. 10-figure references should be rounded to 8-figure as the GPS system is not accurate to 1m (as would be implied by the use of 10 figures).

Names of organisms

- Vernacular names should have capital initial letters, e.g., Common Rockrose, Red Kite.
- First mention may have scientific name in italics immediately following, e.g., Red Kite *Milvus elegans*.
- Future mention should use the vernacular name or the scientific name only. Which to use depends on the degree of acceptance of the vernacular name, and to some extent the type of article. The preference should be to use an accepted vernacular name.
- Titles of books, etc., mentioned in the text should be in italics (not in quotation marks).
- Use of quotation marks – single quotes to emphasise words or phrases in text, e.g., 'style guru' (use sparingly), double quotes round quoted text or speech.

Tables

- Should be able to fit comfortably within the width of the page. Consideration will be given for larger tables to be shown in landscape orientation.
- Table cell borders (if present) should be in Light Grey.

- Table headings should be above the table and each table should be numbered in sequence.
- Units should be in table row/column headers and should be SI units where possible, with standard abbreviations.

Abbreviations

- Abbreviations should have a stop after them (unless the abbreviation has the same final letter, e.g., Mr). Latin abbreviations should be italicised, e.g., *op.cit.*
- Any non-standard abbreviations should be explained, as should all acronyms, on first use.

References

- References within the text should be of the form .. (author, date).
- The layout of references in the final bibliography should follow our house style. See current papers.

Appendix: Hints on writing Excursion Reports

- Do not let any of the recommendations below discourage you from writing and submitting a report. The Editors are grateful to all writers of reports, and the individuality and variety of the different reports is an important part of their significance and interest.
- Concentrate on notable, unusual or otherwise significant and interesting items.
- Avoid mere lists of common species, e.g., by simply stating the number of such species recorded and noting anything of particular interest (e.g., unusual habitat, number or activity) about any individual species.
- Avoid descriptions of sites or locations merely echoing the Excursion Circular. But descriptions of striking or particular features, habitats, etc., relevant to particular records are desirable.
- As far as your individual style allows, follow the journal's editorial and house style re the use of vernacular and scientific names.

Calendar of Events 2012

Apr	14	Yorkshire Conchological Society Field Meeting: Howell Wood Country Park. Meet in car park north-west corner of wood at 10.30 (SE433090)
	19-20	National Federation for Biological Recording Conference: Great Hallingbury Manor, Bishops Stortford. *Biodiversity Data: in policy and practice?* Contact John Newbould
	28	YNU Natural Sciences Committee Meeting: St Chad's Parish Hall, Headingley 10.00 – 12.30

May	1-2	Basic Field Skills for University of Leeds Students 1st Leeds Discovery Centre – 2nd St Chad's Parish Hall. Start 9.30. If you are willing to tutor a small group please contact Terry Crawford 01904 760849 nterryjcrawford@btinternet.com
	5	Snail Training Day: Bank Island, Wheldrake Ings (SE690447) 10.00-4.00. An introduction to the identification and habitats of Slugs and Snails. Contact Adrian Norris for details and to book a place AdrianXNorris@aol.com
	5	Bryological Section Field Meeting: VC62 Ashbury, Rievaulx. Meet on the roadside at 10.00 (SE564843)
	5	Marine and Coastal Section Field Meeting: Redcar Rocks and Sands and Saltholme RSPB Reserve. Meet 9.00 at (NZ605252)
	12	Yorkshire Conchological Society Field Meeting: Bransdale north of Helmsley. Meet 10.30 in car park, Carlton Grange Plantation (SE614886)
	19	YNU divisional field meeting: VC64 Fairburn Ings. Meet 10am at (SE451277). See Circular 875 on p72 for details
	23	Entomological Section Field Meeting: West End Farm, Muston 10am (Check in advance with Philip Winter 01723 512218 pqwinter@btinternet.com)
	26	Botanical Section Field Meeting: VC63 Anston Stones Wood. Meet in lay-by on A57 at 10.30 (SK537828)
Jun	28-4	Wyke Beck Valley, Leeds Wildlife Discovery Week (Bioblitz): Details Ella Smith 0113 2380601 www.groundwork.org.uk/leeds
	9	Botanical Section Field Meeting: VC64 Acaster Malbis. Meet in the village at 10.30 (SE590448)
	9	Marine and Coastal Section Field Meeting: Sandsend, Whitby. Meet 12.30 (NZ860129)
	15-16	York Bioblitz and Environment Fair: York Museum Gardens. 24 hour Bioblitz organised by OPAL, Yorkshire Museum Trust and NEYEDC. If you would like to be involved please contact Sarah West 01904 434577 (work) sarah.west@york.ac.uk
	16	YNU divisional field meeting: VC65 Foxglove Covert. Meet 10.00 in car park at at SE163974. Photo ID is required to get through security at gate house. See Circular 876 on p73 for details.
	21-23	National Moth Night investigating Brownfield Sites *e.g.* old quarries, disused railway lines, reclaimed coal tips, gravel and clay workings.
	23	Botanical Section Field Meeting: VC61 North Cliffe Wood & Harswell. Meet on the roadside at 10.30 (SE863374).
	23	Marine and Coastal Section Field Meeting: South Landing, Flamborough. Meet 12.00 (TA230692)
Jul	25-1	National Insect week. See: http://nationalinsectweek.co.uk/niwReports/eventsdisplay.php?sregion=10 for events in Yorkshire including June 26 and 28 at Leeds Industrial Museum Armley.
	7	YNU divisional field meeting: VC61 Tophill Low. Meet 10.00 at TA072484. See Circular 877 on p74 for details
	7	Dragonfly Identification Workshop: Rodley LNR 1030-4.00. Contact John Bowers to book a place 01132 758957. j.k.bowers@o2.co.uk
	10-15	Recording underworked areas in VC65 based in Swaledale to support the Yorkshire Dales National Park Biodiversity 2020. The surveys will be organised by Adrian

		Norris, Bill Ely and John Newbould. We will be using B & B accommodation in Reeth to record in three 10km squares around Bowes (north of the A66): NY81, NY82 and NY91. Sunday 15th July there is a BSBI meeting in the area. If you wish to participate, especially if you have sites of interest: contact Adrian or John. See pages 2 and 4 of the membership card. A programme will be issued nearer the time.
	12	Historical Section Meeting: York Museum, meet 11.00. Refurbishments and work in progress.
	20-21	Moth Identification Workshop: Rodley LNR 3.00-10.00 and 9.00–12.00. Contact John Bowers to book a place 01132 758957. j.k.bowers@o2.co.uk
	14	Botanical Section Field Meeting: VC62 Castle Howard Lake and Woods. Meet near the lake at 10.30 (SE708712).
	21	YNU divisional field Meeting: VC62 The Howls, The Ings and The Carrs. Meet 10.00 at (SE979789). See Circular 878 on p75 for details.
	21-22	Marine and Coastal Section Field Meeting: 21st Filey Brigg. Meet 10.00 (TA120813) 22nd Crook Ness, Scarborough Meet 11.00 (TA025935).
Aug	4	Botanical Section Field Meeting: VC65 Locker Tarn. Meet in Carperby Village at 10.30 (SE033919)
	4-5	Marine and Coastal Section Field Meeting: 4th Thornwick Bay, Flamborough, meet 11.30 (TA234722). 5th Selwick Bay, Flamborough , meet 12.00 (TA254706).
	11	YNU divisional field meeting: VC63 Scammonden, Upper Derwent Valley. Meet 10am in top car park SE055163. See Circular 879 on p76 for details.
	18	Marine and Coastal Section Field Meeting: Runswick Bay. Meet 9.30 (NZ810160)
Sep	15	YNU Natural Sciences Committee Meeting: St Chad's Parish Hall, Headingley. 10.00 – 12.30.
	16	Marine and Coastal Section Field Meeting: Robin Hood's Bay. Meet 9.00 (NZ953048)
	30	Yorkshire Conchological Society joint field meeting with the Marine and Coastal Section: Meet in the car park at Reighton Gap at 10.30. (TA139762). Low water 1m. at 11.30am Bridlington.
Oct	6	Yorkshire Conchological Society Field Meeting: Meet near pond in Fridaythorpe Village at 10.30 (SE875591)
	6	Bryological Section Field Meeting: VC64 Stocks Reservoir & Gisburn Forest. Meet in the car park at 10.00 (SD732565).
	12	Education Committee Meeting: NEYEDC, St William's Collage, York, 2.00
	13	YNU Executive Meeting: St Chad's Parish Hall, Headingley, 10-12.30
	13	Entomological Section and Lepidoptera Group, AGM Exhibition & Conversazione: Doncaster Museum & Art Gallery, 10.30am.
	13	Botanical Section AGM: St Chad's Parish Hall, Headingley at 2.15
	13	Historical Section Meeting:
	14	Marine and Coastal Section Field Meeting: North Landing, Flamborough Meet 9.00 (TA239720)
	27	Yorkshire Conchological Society AGM: 17, West Park Drive, Leeds, LS16 5BL at 1.00.
Nov	17	YNU AGM: Harlow Carr, Harrogate

Yorkshire Naturalists' Union

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The Naturalist

Notice to contributors

Contributors should indicate whether they wish their manuscripts to be subjected to anonymous peer review. All other manuscripts will be reviewed by the Editorial Board who at their discretion may send them to third parties for comment and advice.

Original articles should be submitted electronically as an MS Word document to Dr A. Millard at a.millard@leedsmet.ac.uk.

Please see *The Naturalist Guide to Consistency* in this issue (p77), and please **avoid** the following:

- using tabs to tabulate information (please use MS Word table format or separate the column entries in a single row with commas and enter a paragraph mark at the end of the row).
- inserting any figures, graphs or plates into the text; indicate their proposed locations in the text and send as separate files.

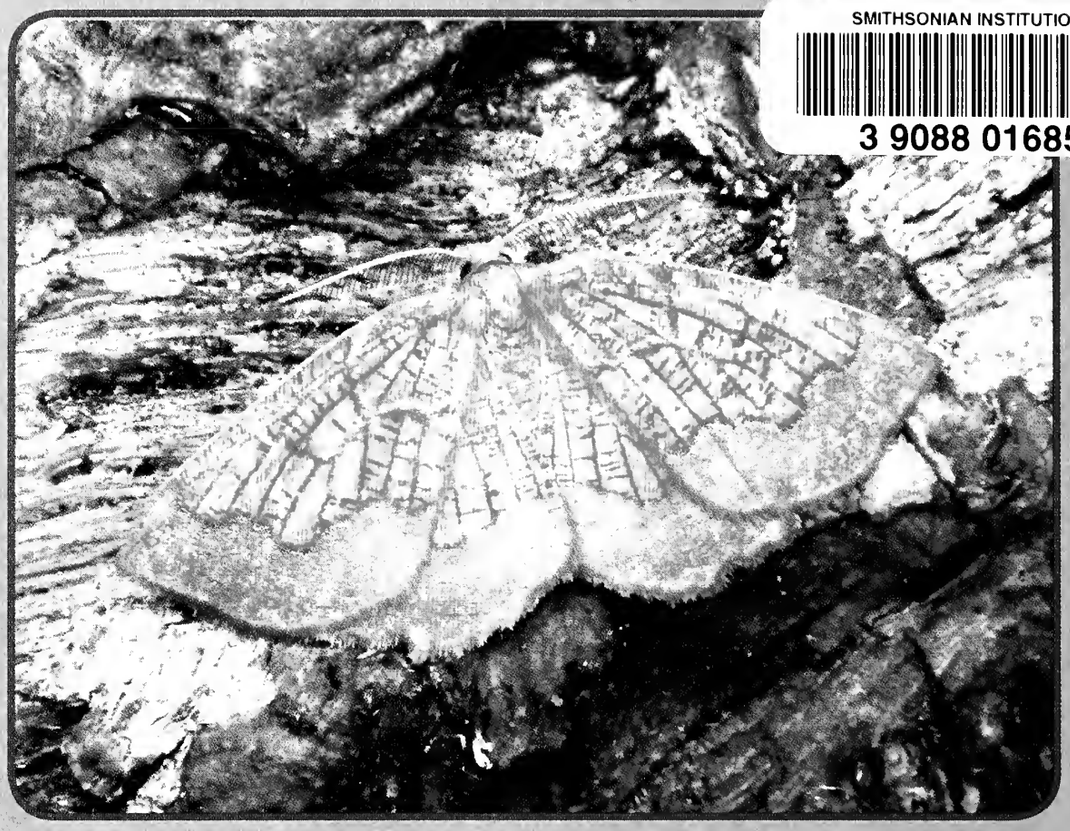
Good quality, high resolution images are very welcome and should be sent as .jpg files, with a separate MS Word file containing the caption and name of the person to whom the image should be attributed.

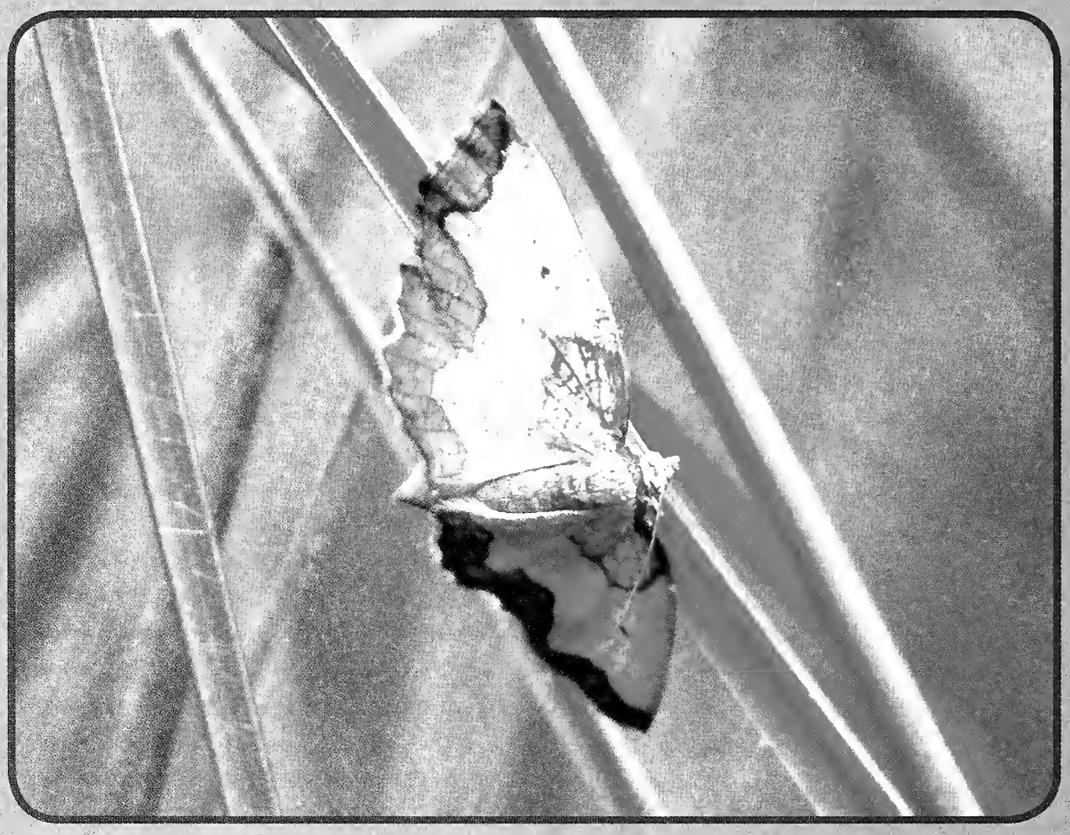
If electronic submission is not possible, contributions should be sent to Dr. A. Millard, Woodland Villas, 86 Bachelor Lane, Horsforth, Leeds LS18 5NF (Tel. 0113 258 2482)

Contributors should ensure the accuracy of reference citations. The Editorial Board and Council accept no responsibility for opinions expressed by contributors.

Copy Dates:
April issue - **14 February**; August issue - **14 June**; December issue - **14 October**

ISSN 0028-0771





Yorkshire Naturalists' Union

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