Interview with: Colin Howes (part 2)

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Interviewer: Lynne Fox

I want to take you back to the finding of the track way in the trench. Were you actually there when it was discovered?

I'm not prepared to say!

[Laughter]

Okay, okay, and you've talked about how...

[Both talking]

Yes, I suppose I would have been.

And you talked about how Peter Skidmore had examined the insect life from around the track way. Can you tell me why he did that, why that was, I mean, I am going to talk to Peter but can you tell me why he would do that and why that would be important?

Yeah, okay. Right. With regard to the track way you've got to bear in mind that at that time we were not, to say the least of it, we were not welcome on the moor and a variety of people would come on with William Bunting. We went on under the, shall we say, under the protection of a piece of historic legislation that Bunting had discovered. So it was the, under the heading of, people who had rights on the moor, and right to access to the moor were the, the commoners of Thorne their heirs and assigns. And in that William Bunting was a commoner, you can't get really much commoner than William Bunting, he was a commoner of Thorne and we were his assigns. So we went under this, we were on this under his jurisdiction shall we say.

But, I mean I was, I shouldn't really say frog marched, no, no, I wasn't frog marched, but, I was on with a bunch of people including William's, one of his sons, Bill, young Bill, who was, he'd, he'd been very ill, he'd, I think he suffered from asthma very badly, but I think there had been all sorts of other medical problems and he'd been what you might call a sickly child. He slowly became fit enough to come onto the moor. He was a very, very determined young man, quite fabulous actually I should think his mother and father were really, probably without him realising, but very impressed by his grit and determination. He'd been, he was bed ridden for ages, he didn't go to school for ages, and he decided to try and build up his strength by, the local authority had just started, they'd just built a swimming baths in Thorne and he decided to teach himself to swim and to swim a mile. I mean, this is somebody who you know, is too feeble to go to school and he, he built himself up and he ultimately did swim a mile. But, he would come onto the moors with us when this dam building business was going ahead and on one occasion he, young Bill was not very well so I agreed to sort of take him off the moor and take him home and we were grabbed by the police.

I mean, it's just so ironic, now the local authority has a Thorne Moors Access Officer, then you were taken to Court, if you, you know, you were done at law for actually setting foot onto the place. Now how things change and this is all through William Bunting. I mean, if it hadn't been for

Bunting there'd be no, you know, conservation argument to, to argue over, you know, it would be just purely academic. The...

Why would you, why were you, were you arrested?

Mmm.

On what grounds?

Well, because we were trespassing on, I think there had been, well there had been fires on the moor and I assume that some of Fisons equipment had been destroyed and damaged, destroyed or damaged, but, yeah, that's another story. I remember being on top of Thorne Colliery tip on one occasion looking out over the moor when it was burning away. The fire brigade was on there and there was clearly somebody out there setting fire to parts of the moor, while the fire brigade were on, you know, I mean it certainly, it wasn't us, I mean we didn't want it to burn because of what we knew was on there and there were certain.. Curiously enough a great friend of ours, Helen Kirk, brought a photograph of a spider in to the museum the other day for, a spider for identification, and it was, it was a thing called Aranius Marmarius va, variation of, variety shall we say, pyramidatus, va pyramidatus, and when I used to go onto the moors in the early seventies this was quite a feature, quite a flamboyant species, quite colourful and big species with huge and powerful webs, I mean, you could literally get caught up in these spiders webs. Amazing things, I've never seen anything like it before. Well after the, after there was a series of fires, well, I hadn't seen any of these, this particular kind of spider from the early seventies until Helen Kirk brought a photograph of one in, just the other day. So fortunately these things are still around.

A photograph of one that had been seen on Thorne or..?

Well this particular one, no, it'd been seen on Potterick Car, again which is, in a sense similar to Thorne Moors, similar to the edge of Thorne Moors, the edge of Thorne Moors is, you go through a series of sort of, fenland habitat until you get out onto the mire itself. Well, Potterick Car is a fen, calcareous fen, so, it, these spiders are sort of bog and fen indicator species.

Let's go back…

Yeah, go on.

Let's go back to Peter's work.

Yes.

As I say I will be speaking to him….

The, the, yeah, well ask him about the tramway because it really is quite fascinating and it, it was a splendid break through and so much of subsequent research programmes on the moor have sort of hinged on that early work that he and Paul did. There was somebody, oh gosh what they called, Kenwood, can't think of his Christian name now, oh gosh, anyway, Harry, Harry Kenwood, the celebrated Harry Kenwood. To find, in that, this tram, this track way had been found in order to work out what the habitats were like, what the climate was like, what, shall we say domestic fauna was present, if any. Peat was, peat samples were taken from around the baulks and wood down there and in examining these samples of peat the cytenous remains of insects were revealed.

What do you mean by that?

Well, the insects have an external, we have an internal, we have a bone skeleton inside in our flesh, well insects are constructed with an outer skeleton, an outer armour plating, and that skeleton isn't made out of calcareous bone, it's made out of a material, an almost indestructible material called cytin.

So they were looking for insect remains, chunks of cytin effectively and they found it, and they found lots of fragments, and they found lots of fragments of clearly lots of different kinds of insects. So they weren't looking at an insect, they were looking at a whole fauna of insects and in looking at, in putting together these species lists it became possible, well because of what we know about current insects, it became possible for Peter and Paul and Harry Kenwood to look at these species and to say, look at the sort of climatic regime that must have prevailed to enable these things to occur. Only you get this where species have a northerly distribution or a Mediterranean distribution or a central European distribution. So they were looking for indicator species which might give a clue as to the prevailing sort of climatic conditions.

Where, human activity came in they were looking for species that were associated with domestic animals, you know, pigs, sheep, cattle, etc, and sure enough they found species associated with cattle, cattle dropping, cattle dung, so you're track way was possibly a drove way. You know, gradually by using these very imaginative and at that time seldom used techniques and technologies, this picture started to emerge as to what was going on down there and what was going on, you know, more significantly what was going on in the Thorne landscape at the time of the forming of the, of the moor.

Whilst...

A whole series of subsequent studies refining certain elements of that have gone on, largely, that occasion in many ways changed Paul Buckland's academic life. I mean he was here as a Field Archaeologist, he had associations with the York Archaeological Trust and he, he ultimately went to Sheffield University as a lecturer and ultimately professor of a department, the department there and in his role at Sheffield and now in Bournemouth, well hang on, just a minute, he went to Birmingham first wasn't it, yeah, he went to Birmingham and then Sheffield. And both in Birmingham and Sheffield he sort of left a trail of students who were looking at this paleoarchaeology or paleoentomology research which said so much. I mean, climate change is very, you know, very much at the front of politics and press these days.

Well they were looking at that, they were sort of getting a fix on what was happening in the Bronze Age by looking, not particularly at botanical indicators, you know, this had been done in the past, but far, it was found that the insect remains were a far more refined means of monitoring what temperature regimes and weather systems were prevailing at that time.

But, you know, there's been a glamorous series of students from that time, from the seventies to the present time, of students who have produced absolutely excellent and most inspiring work, really, you know, on the back of Bunting's interest, Pete Skidmore's interest, Paul Buckland's interest. Which, you know, it has refined and further refined what is known about these faunas, climates and so forth.

One very interesting piece of work relatively recently done, was looking at the dendrochronology or the ageing, the tree ring ageing of oak, but particularly pine on Thorne Moors. Fisons having milled large areas of Thorne Moors down as, more or less as far as they physically could do, got down to

either the underlying clay or a very thin skin, relatively thin skin of the peat. And in certain light, this time of year, well autumn, winter, early spring, where you get these very powerful low sunrises and sunsets, you can look across the peat surface and any slight undulation is highlighted. I mean it's an ideal time of year for looking at ridge and furrow in the countryside at large, but on Thorne Moors you could see where Bronze Age trees had been, the stumps and root systems are still there and you can actually work out the distribution and the population densities by looking at, by using this technique.

You mean tree population densities?

Yeah. One of Paul's students took samples of many of these trees. She was able to age them, relate the ages of those trees with subsequent generations of trees from other sites and right up to modern time to actually back track back to actually how, you know, she was able to age those trees and she was looking at the advance and decline of tree populations as the moor was developing and sort of almost moving about in a sort of a, amoeboid sort of way, as it was growing as a raised mire and expanding or indeed contracting. But, yeah I mean these things were just unheard of and totally undreamt of and unexpected when William Bunting was first drawing us into this work. I mean had it, had he not shouted long and loud and generally sort of embarrassed people into taking an interest in the site, it certainly, well my view is that it, it would have been destroyed beyond any sort of salvation. It's after use as a sort of brown field site would have been for, I guess for some sort of industrial development. It certainly wouldn't have been a Site of Special Scientific Importance, National Nature Reserve and now of course, these various accolades of international importance that it, that it enjoys.

At one stage the national, conservation body, Nature Conservancy Council, felt that Thorne Moors was so important, people ought to be kept off. Then they took the view that it had been so despoiled by the peat industry that, it, it wasn't really worthy of conservation status and sort of, William Bunting more or less single handedly cajoled the Nature Conservancy Council into, you know, they had to sort of come kicking and screaming into the realisation that in fact it was important and ultimately very important and ultimately of international importance. So, you know, we owe an awful lot to William Bunting. At the same time he was fighting, not just that battle, but many other battles in terms of public access, public access to river banks, canal banks, where traditionally individuals and local authorities had prevented people gaining access to paths, track ways, green lanes etc. He spent endless time researching the basic archival proof that these, you know, these access, these means of access to the countryside were there, were legal and should be exercised, instead of should be suppressed. He, his routine was to force this kind of documentation out of private hands, or out it from the suppressed circumstances into the public domain and he would try to create multiples of copies and place them in archives, local authority records, departments, etc, etc.

He had a very close relationship with York University particularly through their then librarian Harry Fairhurst. I think he'd known Harry Fairhurst for many, many years and indeed a number of the lecturers and departmental heads at York, he'd, helped them in their academic pursuits, you know, decades earlier, so they understood what his campaign was about and they, you know, they took him very seriously and you know, where they could they helped him. And certainly the majority of his archival, of Bunting's archival evidence that he used in a whole series of public enquiries and court cases that ended up at, in the York University archive.

When you, you described how when you first came to this museum it was extremely active and academically and intellectually very active in the naturalist field and we've now reached a point where it has, Thorne Moors itself has stimulated a great expanse in knowledge in all kinds of fields.

Was there any interest and activity on Thorne Moor in the naturalist field before William Bunting sort of enabled access and encouraged, well forced people to come on, to have a look at it?

Oh yes, there was a, there's long been an interest in the natural sciences on Thorne Moors. When you are able to speak to Martin Limbert, one of Martin's pre-occupations has been to pull together historical studies which show individuals, show, well, the work of individuals on Thorne Moors going back, well going back centuries to be honest. The local historians and archaeologists have known for instance the work, the writings, not the work, the writings of Abraham de la Pryme and it was really only William Bunting who took that kind of evidence seriously and tried to match that kind of, well not contemporary, so I think even when de la Pryme was writing it was sort of, even then it was retrospective, but matching his diary writings with, well trying to sort of pull together hard evidence to support what de la Pryme was writing about and more particularly to actually find documentary evidence in suppressed, long suppressed by vested interest, but evidence of documentary sources, sort of buried in the, what's it called now, the, National Record Office.

PRO.

Public Records Office, thank you, yes. Again he made contacts down there with certain individuals who understood what he was getting at, not your sort of jobs worth type characters, but people who were, who realised that these documents were live documents, centuries old though they maybe, you know, dating back to the, well in this particular case the first half of the sixteen hundreds. And he found versions of documents where he was able to track back to the original and then find subsequent additions which had been, which were fraudulent in the interests of, I should, I suppose generally you would say land owning interests, I suppose. Yeah, it was all heady times.

One, I mean one of the people who, it would be very nice if you could interview him, Gerry Pearlman, who was for a time he was Bunting's Solicitor, or Legal Advisor. Bunting was entirely self taught in the legal arts, shall we say, probably, it would be right and proper for other people to explain to you why that was. But, in terms of presenting his case in the courts and preparing case work and so forth, he used Gerry Pearlman, Gerry Pearlman was based in a legal practice in Leeds. He became the, oh gosh, I don't know whether he still is, but he became the legal advisor for the, oh, the Ramblers Association and I should imagine to a large degree a fair amount of his background knowledge and experience in the use of these rather obscure, some of these obscure archives was as a result of his close contact with William Bunting. I remember being in Gerry Pearlman's office on one occasion, and seeing in the waiting room, in some of the rooms, photocopies of legal documents that Bunting had spent years trying to track down and you know, finally acquired as the, you know, he knew from his various researches that these things, these documents had existed and probably still did exist and he managed to track, basically track them down and these were photocopies of them were adorning, framed photocopies were adorning Gerry Pearlman's suite of offices in Leeds.

Very frightening times in many ways, because we realised that, I think most of us were from a background of where, to be in the newspapers was a terrible disgrace, I mean this was, you know, shameful really and to, to be sited in a court case was decidedly you know, not done and you, it was quite terrifying 'cause you were completely out of your depth and to be called as a witness, was quite, quite frightening which did happen from time to time.

In, are you prepared to say, in what sense?

Well this was to do with access to, access to Thorne Moors. Quite, this was round about the time that Bunting's Beavers, so called, where, water was flooding off the moor and being, and indeed

being pumped away from the moor by the local internal drainage boards. So that, so Bunting's idea was to, to dam these up when the work force, Fisons work force came on Monday morning, they would dig 'em out. Next weekend the dams would be put back bigger and broader and deeper than ever before, they'd then be dug out, or dynamited out. They'd be put back in, trees and shrubs and railway sleepers and all sorts were bunged in, with it being peat you could put gelignite in and it would explode out, but it would also slump, it'd be like sort of blowing a hole in custard, you know, it just sort of flowed back in.

So ultimately, Fisons took legal action against Bunting and I think, I mean the story line goes, the writ was delivered to Bunting's door and you know, knock, knock, knock 'Are you William Bunting, of', you know, 'here's a Writ'. Opens it up, and to the amazement of the, the deliver of said Writ, shouts through to his wife, who he referred to as mother, 'Hey Mother', 'what is it William?' 'Fisons are taking me to court', 'Oh William, that is good news', and of course they just couldn't understand. But Bunting had no monetary resources so he couldn't take, you know a major industry to court but if they took him to court he could then bring all of his archival background supportive evidence and the justification for, I mean, he, as you probably appreciate from other people you've been interviewing, Bunting took the view that a private industry was making, money for itself and it's shareholders which, and that, that funding that money, that wealth, should effectively have been going to the commoners of Thorne. Because the, the, access to the peat for fuel or whatever use was for the benefit of the commoners of Thorne, their heirs and assigns. So that was really his campaign. Yeah, yeah.

So he had his day in court?

He had many days in court and of course as you would appreciate if you win then, who you've won against will then appeal and it was just as a ricocheting sequence of, in court, appeals, counter appeals, etc and his health was deteriorating very rapidly and ultimately he simply couldn't defend his case.

And this case hinged on his argument that he, it was an argument about access that he had a right to go on to the area Fisons claimed they had the rights over?

That's right yeah, well not he but the, all of the people of Thorne, the commoners of Thorne.

And who is...

It was a document called the Decree and Award. If you talk to Peter Skidmore he will talk to you in detail about that, but that was the document that it was all hinged on.

And you've already talked a little bit about how that affected you personally in, when you visited the moor, you were marched off and, by a policeman., when you look at the other people, yourself and the other sort of interested and academic people working on the moor at that time making these significant discoveries, did it affect you on a practical basis, or did they tend to leave you alone because they knew you were doing some significant work?

The…

Were you doing it with Fisons knowledge and tacit approval is really perhaps a way to put it also?

What we were doing here was to collect, I think this was, would be the case with most people from the universities, they would go on, I mean it wasn't destructive or anything like that it was, you

would go on and record and collect and write up your, an analysis of your findings and it was really that that Pete Skidmore and myself and other were involved with. So in, in journals like, I mean, there's a wonderful organisation called the Yorkshire Naturalists Union. It's a union of anything between forty and sixty, it oscillates between forty and sixty Natural History Societies in the Yorkshire area, it also has many individual members, but the great strength of the Yorkshire Naturalists Union is that it's been going for an awful long time. It started off in the 1860s, it's been running a standard series of field meetings since the 1870s, that still goes on in the same sort of way, so you can monitor change, because the methodology is much the same and it's been publishing for that, that period of time, essentially through a journal called 'The Naturalist', fantastic journal it is. Initially it was a monthly journal, then, through the privations of two world wars it dropped down to being a quarterly journal which it is at the moment. It's currently edited by Professor Mark Seawood at Bradford University and it's a, a fantastic journal. It deals with a broad range of subjects, largely, but not exclusively, related to Yorkshire and the North of England. But, that and ultimately the YNU, Yorkshire Naturalists Union, produce a bulletin which comes out twice a year. Well, the YNU publications had a great sort of hunger for new information. So many of the discoveries on Thorne Moors and ultimately on Hatfield Moors were published in The Naturalist. And this is, you know, broadly, what Pete Skidmore and myself were doing. And many others, Martin Limbert, who hopefully you will be interviewing in due course, was very actively collating, you know, very disparate information of all sorts of groups of organisms. Mainly birds, but, all sorts of other organisms, and collating these into, rather important papers that were, you know, for the first time easy of access, you didn't have to do, you know, months of years of slavish archival work, there it was for all to see.

And were obstacles put in your way of you collecting this practical information or did you find it easy?

Well, I think all the obstacles were fended off by William Bunting, I mean we, we effectively had a free ride, as it were. He cleared the way and we sort of went on with him, or through him. It wasn't just Thorne Moors either. The initial, what we were racing to pull together initially was a document, what turned out to be a very corpulent document and ultimately a very influential document in terms of later work, on Thorne Moors, but the Hatfield Chase generally and this first document was called 'An Outline Study of the', I can't think of what it's called, I was going to say 'An Outline Study of Hatfield Chase', but I think, let me just reach one down. Be with you in a sec. Gets the step ladder out and reached to the top of a rickety pile of documents.

[Pause]

'An Outline Study of the Hatfield Chase, The Central Electricity Generating Board Propose to Foul'. That was the, that was the lorded title of the first document. But effectively it brought together from huge literature searches by William Bunting, Malcolm Dolby, who I've mentioned, who was the Keeper of Archaeology' here, myself and Peter Skidmore, and that was to form the basis of a proof of evidence that William Bunting was able to use to fend off the use of Thorne Moors as an ash, fuel ash disposal site.

Very shortly after that, in those days there were just two nature reserves in Doncaster, one was Sandlebeet Nature Reserve, its legal status was Local Nature Reserve, and then there was Potterick Car, or Low Ellers, Low Ellers Nature Reserve, which was a Yorkshire Wildlife Trust, or a Yorkshire Naturalist Trust as it was then called, nature reserve. The Low Ellers Nature Reserve had most inspirational Chairman, who I mentioned earlier, [Laughter], sorry about this, whose name escapes me, oh gosh, this is so embarrassing! Rodger Mitchell, gosh, sorry Rodger! Prior to the building of the current M18, the government transport agency were seeking to put a motorway

round the southern side of Doncaster and there were three proposed routes, The favoured of the three took out Sandlebeet Wood, and Low Ellers Nature Reserve, so again Bunting to the rescue, 'we've got to fight this, right, I want you all to just dig around and get as much information about these sites as you can.' So again, huge amount of literature searching, I mean it, you've got to bear in mind it was, it was before the days of computer databases, you literally had to do literature searches, you'd got to read everything. I mean, there may well have been indexes, but that hardly helped, you'd just got to go through the lot.

One of the great strengths of Doncaster Museum is that we had good runs of relevant scientific journals. Particularly 'The Naturalist', which I've mentioned. So, the Doncaster Naturalist Society the Doncaster Ornithological Society, Yorkshire Wildlife Trust, of course because it was their nature reserve and in that Sandlebeet was a local authority property, although I think the local authority was sort of neutral on where the, where the road actually went. They were in favour of it happening but precisely where, I think they were happy to, you know, listen to argument. So we all had to give evidence at the, by we, Peter Skidmore, myself, John Barwick who's the Curator here, the Director of the Museum Service, he had to give evidence too. But we, produced one of the documents I have just shown you, as the basis of all of the biological information known about these two sites and again, they turned out to be far more significant than anybody had previously appreciated. The element, no, I think it was the whole document, the document itself was republished by the Yorkshire Naturalists Trust, it's quite a rare document but it's the basis really of all biological recording, modern biological recording on the very successful Potterick Car Nature Reserve. I mean that really has been a huge success story in terms of visitor centres and all the rest of it, and of course it simply wouldn't be there if it hadn't been for all that effort.

Shortly after that, some lads from Edlington Comprehensive, who had been campaigning for saving Edlington Wood, they'd been getting nowhere by making representations through, what they thought were the normal formal channels by, you know, talking to councillors and the local authority, who I think had been sympathetic but, not able to sort of rise and save the day on behalf of these lads, they, in desperation went to William Bunting and William Bunting thought, yeah, these people are, these kids are thinking for the future, future generations. They are wanting to save that wood for the local community and whoever comes after them, you know, it's not a sort of self serving project, you know, they're looking at community interests, right. And people like that Bunting would help. He was absolutely worn out most of the time because he would, he'd work round the clock and although he was, you know, fighting battles on Thorne Moors, public enquiries here there and everywhere, people from all over the place were coming to him with their problems, there was for instance open cast coal mining proposed for Temple Newsam in Leeds, or one or two places in West Yorkshire and the local people in desperation came to Bunting for help, 'What shall we do? How should we fight this? How should we approach the situation?' you know, 'what's the best use of our and everybody's time?'

So, not infrequently the same gang of people who helped him on Thorne Moors were helping him at, you know, Temple Newsam on the outskirts of Leeds and various places near Castleford, and so forth. And it, it's amazing it's left, you know, we stumbled across a bit of scruffy woodland, but, because of the species that were found in there, we found it wasn't just a piece of scruffy woodland, this was ancient woodland, you know. Okay the current generation of trees were not necessarily very noble and very ancient but the site itself was, you know you had ancient woodland indicator beetles and spiders and so forth and this was threaded into an argument, put into the public enquiry and although, open cast coal extraction did go ahead, that wood and one or two other bits and pieces of ancient landscape survived. So, I mean, in all sorts of completely unsung ways Bunting has left a huge legacy around the Yorkshire region that, I mean, those people involved will know and remember, but you know, society at large won't.

We've talked almost exclusively, with the exception of what we've just been talking about, about Thorne Moor, does Hatfield Moor figure in the scheme of things? And if so how?

Well, the, an organisation called the, well ultimately called the Thorne and Hatfield Conservation Forum was established based initially in Thorne at the, the council offices in Thorne.

When you say it was established who came together to…?

Well, in that it would have sort of worn most people, authorities, institutions out, just to, to sort of continue running around after Thorne Moors, the local, it was the local authority here who actually instigated this, organisation.

With a view to what?

I should, now then, I would really have to, I was certainly involved in an early day, in the early days, you would, the participants were, the Royal Society for the Protection of Birds, English, well what became English Nature, the Nature Conservancy Council, became English Nature, the Yorkshire Wildlife Trust and the, it was a sort of community project based in Thorne and it was to, you know, pull together strings, associated with Thorne Moors and bring it to the attention of the public at large. I mean, the work we'd been doing up till then, you simply didn't have time, well apart from giving talks to societies and organisations, you, there was no opportunity to, I was gonna say, to speak generally to the public, to Joe Public as it were. Although I, we did actually do displays here and I did a travelling display which went to Doncaster Library, but generally you couldn't, there was no full time, no, yeah, there was no full time sort of public outreach facility. So a project officer was employed to get the thing off the ground.

One project that was highly influential was, and one thing that we'd been crying out for, for ages and ages, was an entomological survey of Thorne and Hatfield Moors. And this was, again, this is something that you really need to speak to Martin Limbert and Pete Skidmore about 'cause they were more involved in a practical way than I was, at that time. But it resulted in a project manager, putting out on both moors, but mainly Thorne Moors I've got to say, sets or grids of what are known as pit fall traps and water traps. The pit fall trap, you put, where you'd dig a hole in the ground, little hole in the ground and put a, like a plastic beaker in there, and then within that plastic beaker you put another plastic beaker and put in there some water with some preserve, well some suds to break the surface menisca, so if anything dropped in it would go straight in and drown and a preservative so the stuff that went in didn't rot and you would have, a grid would be four corners, a centre point and the centre of each side, so four, five, six, seven, eight, and one in the middle nine. So there'd be nine pit fall traps and at each corner, and in the middle, was a little saucer on a stick, or a little beaker on a stick, so, and the idea was that anything, any flying insects might be attracted to drop into that.

And how big, how big would the grid be?

Well it was a number of metres, it was quite, you know, it was quite large, you know, bigger than this room, and you had numerous of these grids across Thorne Moors and a few on Hatfield Moors and it was a major military operation and that, that was with the acceptance of Fisons, they were participants in this. Because they'd been lambasted with claims as to how important it was from right, left and centre, so, you know they were wanting to see whether this was true or false, I suppose. This trapping system produced tens of thousands, probably hundreds of thousands of specimens. It was colossal. The lad who organised it at certain intervals of time gathered all this

material out, back, reset the traps, the collected specimens were put in numbered tubes, you know, which grid, which pit fall trap within each grid, etc. He then painstakingly, I mean this is a gargantuan piece of work, he then rapidly went through each tube and of course there were hundreds, upon hundreds, upon hundreds of these tubes, because he was gathering them in, I can't, was it every month, I can't remember, or every fortnight, but at every collecting there were hundreds of tubes and he was, he'd brought together a number of experts who were prepared to identify material for him. Either for free or for a fee.

So the flies would go, certain groups of the flies would go to a certain expert, certain groups of insects would go to other experts. Other groups of insects, beetles for instance, would go to another expert. Clyminoptra, bees, wasps, or certain elements of them would go to somebody else, spiders would go to somebody else. And so it was passed out. As a result of that, a massive gathering of invertebrate data was compiled. We realised that Hatfield Moors was only perfunctorily being studied so the museums service itself, this is purely Peter Skidmore's work, we mirrored the Thorne work in terms of the methodology and we had our own grids of traps on land that belonged to the Lyon family. Not Fisons but the Lyon family. And it was moor-edge right through to the centre of the moor in an n area of the Moor that we'd got an agreement, a conservation management agreement, Section 39 agreement on that had never really been cleared for peat. So you'd got a pristine situation there. So Peter more or less single-handedly, was identifying tens of thousands of insects. Only those he could do. Those he couldn't do he put to one side, and of course, those he put to one side he returned to some of them but, obviously, al your species new to science are still there not looked at. But a number of these query species he has looked at and these have turned out to be unique to the Moors. His work has upset a lot of applecarts, has led to the redrafting of identification keys, you know, its been an extraordinary piece of work.

And this is from work on Hatfield Moor?

Yeah. This was work on Hatfield Moors. He's just published a huge magnum opus on the invertebrate fauna of both Thorne and Hatfield Moors, that's just come out in the last few days, published by the Thorne and Hatfield Moors Conservation Forum. And absolutely beautifully illustrated by Peter. But he's categorised species according to their national status-Red Data Book status – Nationally Notable status.

What do you mean by Red Data Book status?

Well, in the wildlife conservation world its important to know, certain species are protected under the Wildlife and Countryside Act, and its important that these rare and endangered species are indeed rare and, are known to be – can be proved to be rare and scarce so in evaluating, and it is an extraordinary piece of work that the etymological fraternity but through the Joint Nature Conservancy Council, the JNCC, they've put together what's known as the Invertebrate Site Register. The Invertebrate Site Register identifies sites of important for entomology up and down the country and this system seeks to quantify the importance of sites by awarding Brownie points. Something that's only known in five sites in Britain has a particular category. Species that are known in say a hundred sites in Britain, and by Britain I'm meaning John O' Groats to Land's End. I'm not sure whether Ireland comes into it. I presume it does actually. But, if you've only got, say ten sites within that huge- known sites, within that huge area, then, you know, a species is demonstrably very rare. People like Peter Skidmore would then look at those species and find out their way of life, their ecology, what the problems are, what they need to continue their lives so its possible to work out whether those species are under threat or it may be that certain species are rare - because that's their - they're ultra-specialist they're not necessarily on the decline its just that their requirements are very rarefied as it were. But you have different categories of rarity and

endangeredness based on this quantification of how many sites these organisms are known to occur in and what their ecological requirements are within those sites. So its an astonishingly complex piece of cooperative research by both professional biologists and more particularly by amateur entomologists, amateur naturalists. I mean, broadly the expertise out there is with the amateur, professionals are too busy on their professional ladders and ticking boxes and clearing out, you know, doing administrative housework to actually get down behind a microscope to do the nitty-gritty of work.

Can I just ask you where does the Red Book, the name the Red Book – the Red Data Book come from?

This is a shorthand title for, I think it was probably the botanists who produced a Red Data Book of endangered plant – flowering plant species in Britain and it just seemed the right thing to call it, the Red Data Book. So you have Red Data Book, shorthand, Red Data Book insects, RDB, Red Data Book, RDB, different categories of RDBs.

And it refers to the register you've just described does it?

Well it refers to a nationally agreed register. So in Peter's book, I'll just get you one. [pause to get copy of book] Here you are. In order to quantify the importance of these two moors its possible to compare the numbers and types of Red Data Book species for each site. In with this project are species which are characteristic of certain habitat types and by showing the proportions of a fauna which fall into these various categories you can tell – well, for instance, Thorne Moors, although there are very few trees in the sense of ancient oaks etc – Thorne Moors according to its fauna has a very strong ancient forest fauna. Even though the forest has gone many of the species are still there. And more particularly many of the forest species are there in fossil form down in the peat. So one of Peter's pieces of work is to look at the demise of ancient woodland faunas in Britain by looking at the presence or absence of certain key species through the peat horizons up tot he present time. Absolutely astonishing the work he's been doing.

Beautiful illustrations also

Aren't they. Yes. Well this is where Oldham College of Art is coming through you see. He never did paint like Lowry! Who also went to Oldham College of Art.

Well I think we've had a tremendous long time actually. You must be tired now so, if you think its a convenient place to stop, unless you've something that you think I've missed that I should have included..?

Well I'm sure with your other participants I'm sure you'll be covering all aspects. I've probably missed out the absolutely central points that refer to my personal involvement but, I don't know, I can't remember those.

END