

Thorne & Hatfield Moors Oral History Project

Interview with: Mike Oliver (part 3)

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Interviewer: Lynne Fox

This is Lynne Fox for the Thorne and Hatfield Moors Oral History Project. It's Wednesday 13th December 2006 and I'm talking to Mick Oliver.

We talked before Mick about some very important aspects of the peat industry and about the track way that you discovered on Hatfield Moors. What I'd like to just come back to talk to now a little bit is in your role as the Minerals Planning Officer for Doncaster MBC and the, there are a lot of other mineral resources on Hatfield Moor in particular that are exploited and I wondered if I could come to talk to you a little bit about those. Perhaps you might give me an outline of some of the things that are there on Hatfield Moor that other companies seek to exploit.

Yes, they're a very, very interesting area from a minerals point of view. I think we've got to start from them first being called Thorne Waste or Moor, Thorne and Hatfield Waste or Moor, when they were considered to be a waste land with nothing there, and that's certainly not the case. It's not the case from the wildlife point of view, it's not the case from a local history point of view and it's certainly not the case from a minerals point of view. The South Yorkshire area is very rich in economic minerals and the whole range of the economic minerals of South Yorkshire are present on Thorne and Hatfield Moors. Each moor is different, it's different in its geological make up, but between them they've got all the economic minerals there, and are very, very similar to each other but yet, as I've already said, different.

We can start right at the surface. First of all there's water on the surface, very, very important from Doncaster's drinking water point of view, in as much as the upper solid strata under the moors is, what we now know as Sherwood Sandstone, which is the source of Doncaster's drinking water. So there's a water aspect to the moors, and that's important, important feature both from a wildlife point of view and from an economic point of view. Immediately under that of course is the peat, on both moors there's a raised, a lowland raised mire with three to four metres of peat on the surface, this has been extensively exploited for hundreds of years on Thorne and to a lesser extent, now in more modern times since the seventies, eighties, on Hatfield Moor. But immediately at the surface there is peat, which is a very valuable resource.

On Hatfield Moor there is then some good quality, and when I say good quality I mean from a buildings point of view, there is some good quality sand immediately under the peat. I don't think that is necessarily the case on Thorne. I think Thorne is more of a boulder clay, more of a podsol, it's more waterproof, the immediate subjacent layers under the peat, it's more waterproof on Thorne than it is on Hatfield. But on Hatfield there is good quality workable sands immediately under the peat and then under the sands there is of course the Sherwood sandstone which is the source of Doncaster's drinking water but then as you go deeper, you get under the Triassic I think it is, permo Triassic, there is the coal measures. Now the coal measures which are laid unconformably below the Triassic's are, there's all, there's the whole cyclothem of the coal seams in South Yorkshire, almost entirely unworked, underground. The coal measures dip towards the east they are getting quite deep, the cyclothem is quite deep by the time you get to Thorne and Hatfield Moors, and so Thorne Colliery basically worked the High Hazels seam, which outcrops further towards the Barnsley direction and is non existent there. But at Thorne and also at Hatfield it is a commercially

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viable seam that's higher up the coal measures sequence and so that is the seam that was exploited locally. And also entries were made into the Barnsley seam, I think perhaps at both collieries, but the principal seam worked there was the High Hazels. But none the less all the coal, all the major coal seams, the Barnsley horizon and the Parkgate, Silkstone, all the other major coal seams are present and unworked under Thorne and Hatfield Moors.

This would have a mining subsidence implication were they worked because it would lower the surface considerably on a location that is already very low, at about sea level and you could finish up with a tremendous amount of water there. I'm not saying the coal could not be worked on that level because it could be designed in such a way as to minimise subsidence but if all the coal seams were to be worked under Thorne and Hatfield Moors you'd be looking in an excess of twenty feet of subsidence which would be unsustainable for the agriculture and the wildlife interests of the moors.

Apart from that, on Hatfield Moor there's also one particular geological feature, of geological faults throwing impermeable strata against permeable strata and there's a major aquifer, by that I mean a water bearing sandstone, or normally water bearing, that's the term where aquifer stems from, but in this particular instance it was dry of water at any rate. The oaks rock was penned out by, by impermeable strata thrown against it by geological faults and there's a pocket of gas which when, many years ago when exploration was being done by borehole to try and find oil at very, very deep horizons they accidentally bored through this area of oaks rock that contained gas, under great pressure, about two thousand pounds per square inch. At the time they weren't prepared for it, they were actually using the proper sort of gear at the time, but because they weren't expecting the blow out they'd put the gear on upside down. They were drilling through what they call a burnside arrangement, which was supposed to protect the borehole against such outbursts but they met this gas at a very shallow horizon, totally unexpectedly and it blew out and set on fire. In fact they had to bring a team from America out, Red Adair's gang, it wasn't Red Adair himself, it was, let me see...

Boots.

Boots Hansen, Boots Hansen who came and extinguished the fire. They lost quite a bit of gas but managed to stem the flow and then worked the gas at that point and now that that particular pocket of gas has been worked for many, many years now. They've changed the arrangement where they now actually inject gas into that geological horizon, basically buying it from North Sea at summer prices and stocking it to meet winter demand and when they get these big surges in power during the very cold winters they abstract stored gas from that horizon and sell it at winter prices.

So can I just clarify, at the, all the gas that was there more or less has gone now and they use it as a, more or less as a storage tank?

Yes, I wouldn't say it's all gone, but it had been worked to such an extent that the pressure's reduced considerably from the original outburst, which would be at a geological pressure, which is about two thousand pounds per square inch at that depth. But now they actually inject North Sea gas during the summer into that geological horizon by pumping it in under pressure and then abstracting it out during the winter, yes, that's, that's the case.

Has oil ever been found on Hatfield Moor?

Not to my knowledge, but they were trying to drill down well below the, the coal measures at that time in order to, to explore an anti cline, what they call geologically, an anti cline or often referred

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to as a salt dome, under which gas, sorry, oil is sometimes found. But no, because of the blow out the, and because of the economic importance of that gas the borehole didn't go any deeper at that time. Not by my memory at any rate. So I don't know of any oil ever having been found there, but none the less what we've already gone through shows the substantial amount of economically important minerals under Thorne and Hatfield Moors. All of these of course came under Town and Country Planning Control.

Can I just, before we move onto the actual controls and the ways in which it was sought to manage these, you talked a bit about the sand and I understand there's also gravel, where would the gravel be in terms of the layers?

Basically with the sand, I would say sand and gravel, I would lump them both together as one, as one mineral, one geological deposit. There are layers, clearly, within these drift deposits but the gravel is, to my mind's eye is, is, briefly it's processing the product of sand, so what you do is screen the gravel out of the sand in order to sell the sand for something like concrete making as a small aggregate and then you would sift the larger pieces through various sieves until you got different sizes of gravels and then you'd put the different sizes of gravels into concrete to make concrete. But I would lump sand and gravel together.

And has that been successfully exploited on Hatfield Moor?

Oh throughout the Doncaster region basically, at least through the, the Humber Lake area, as we might call it, more towards the Idle, the Trent valleys, on the, more to the eastern side of Doncaster, there are extensive sand and gravel workings and they've been extensive sand and gravel extraction around Hatfield Moor. Ellahome Farm is a more modern one of course, Tyreham Lakes, just on the western boundary, is another, that have only finished recently. Yes, there's plenty of sand and gravel in that vicinity, the point is that valuable beds of sand and gravel extend under at least the western edge of Hatfield Moor. I would say under at least fifty percent of Hatfield Moor.

What kind of threat does that pose to the conservation of the moor, the fact that these resources exist?

Well because of their economic importance, as I started by saying, Thorne and Hatfield Waste is not a waste by any means. There are some very valuable materials there. As I understand it the surface of the land and the rights to work peat have now passed to the, to English Nature, they're now in public ownership, so the actual surface is, is in English Nature ownership now, it's been given to them by agreement. But during that agreement I understand that the peat operators, who were the surface mineral owners retained ownership in the sands. So whilst the ownership of the peat is controlled by English Nature they have no control of the mineral itself as far as sand and gravel is concerned. One can't work sand and gravel without the owners consent, so it is a difficult situation. But the point is that there are sand and gravel deposits present under Hatfield Moors and the ownership of those minerals is separated from the ownership of the surface.

Could we extract those sands and gravels without damaging the surface?

Without a doubt no, no, if the sand was taken the peat would have to go first, that was the usual thing that has been done all through the Tyreham Hall quarry area. They extracted the peat off the top first and then removed the sand and gravel from below it. I can't envisage that, that they could work, it's scientifically feasible I suppose to translocate the peat having worked sand and gravel below it, but I don't think it's practical really. The peat would be different in its nature in any case and I doubt that it would sustain the wildlife that it does today, because of having dug it up and

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moved it away and put it back down again, it would be a different geological horizon to what it was before. Certainly from a wildlife point of view it would be different.

So mostly what we see from the worked out gravel pits are ponds and lakes that have been left after the.....

There are extensive ponds and lakes, what we refer to as the prison lakes, which are by Lindholme Prison and the Ten Acre lake, which is a lot bigger than any ten acres. Ten Acre lake gets its name from a location rather than a size, I think it was Ten Acre Wood at one time of day. But the lake there is very, very extensive; just about all the western edge of Hatfield Moor is today lakes caused by gravel extraction, sand and gravel extraction. They're important today as wildlife reserves, indeed that was the basis of the restoration plan, the Town and Country Planning conditions on the working was to convert them into a wildlife interest resource. But they're certainly not a lowland raised mire, which they were before.

So although we're collating them with something that looks quite natural, or is a habitat, it's not the, not the habitat of the rest of the moor?

It's certainly not the unique peat land habitat which is immediately adjacent to it. That peat land habitat now adjacent is very seriously damaged, but it is now receiving protection and is now beginning to recover and in five years, thirty five years it will be a totally different looking place to what it is today. But it is recovering as a lowland raised mire, but the, the lakes to the west will be a different habitat.

Different people own different parts of the moor in the past and have had different interests and so on, were the individual owners allowed a free hand and could they if they wanted to, just simply dig up their garden or their field or whatever and begin to extract sand and gravel or did the public have some control over the site?

Well in the old days they could do more or less whatever they liked, in fact that's still the position today almost as far as coal mining is concerned, because they, the coal mines were sunk before Town and Country Planning legislation came into force and so they still have rights retained under what we call the General Development Order and those rights are still preserved today. Now every owner has General Development Order rights and there are certain things that are written down at any rate that they can do. And so on a small scale basis then people have a right to do certain things, like if your roof blows off you can put it back on again without Town and Country Planning consent. There are certain things you have a right to do, but digging a quarry isn't one of them. And so for mining of any sort then you need Town and Country Planning permission before you can do it. So basically sand and gravel working, and peat extraction, all fall under Town and Country Planning legislation.

Whilst there were always weird arguments, going on even today, about rights to work peat. It all boils down to, certainly for any new working you would need Town and Country Planning. That doesn't impinge on anybody that might have rights of turbary, but as far as I'm aware there's only one property left and that was William Bunting's cottage, which has rights of turbary and so they would be able to still go out and indeed William Bunting used to do this, he'd cycle out into the middle of the peat works dig up a turf, put it on to the pannier at the back of his bike and cycle off again with it! Just to establish that he had a right to go and do it and so he'd do that in the middle of the peat works basically. But I don't think there's anyone entitled to do that nowadays, except those that live in that property. But there are some, still today there's some legal arguments going on, on that score, but basically everything comes under Town and Country Planning control.

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So even if a company had the right to say dig the sand and gravel it would have to be covered by planning regulations of some kind?

Yes it would.

And what would the planning, what kinds of things do the planning regulations control?

Well they'd put, the planning legislation is still based on people having a right to do certain things and individual's right to do certain things, to use their property in the way they wish to use them is very important and people always look to Town and Country Planning as stopping something unwelcome happening. But people have a right to do things even if it is generally looked upon as being unwelcome. So Town and Country Planning legislation can only protect something within the law and that's an important feature about it. So, if theoretically somebody wanted to work peat or sand and gravel then they would have to apply for Town and Country Planning permission to do that. Now that permission could not be unreasonably withheld and if it was reasonable that they should work the minerals in a way then Town and Country Planning would have to grant permission subject to conditions to limit damage to the environment, by the environment I mean neighbours and people round as well as pure wildlife interest. But here on the moors things are slightly different because they are Triple SI's for a start, that is Site of Special Scientific Importance. [sic. Interest]

Now that, that designated status is a very important tool or weapon in defence of an area. That gives it the, the wildlife aspects, the local history aspects of the, of the moors, additional protection and then in more recent times, what I refer to as the Natura 2000 legislation, the sites which have to be Triple SI's in order to, almost as an endorsement qualification, they are then in, can be chosen as what we call European sites, Designated European Sites. And these sites have become SPAs which are Special Protection Areas and also SAC's, Special Areas of Conservation under the European legislation. Now that gives it a much higher degree of protection from a Town and Country Planning basis. And so anyone wishing to work peat, or sand and gravel or indeed coal under the sites would have to demonstrate that they weren't harming the conservation interest in these very important sites which are now classed as European Designated Sites and so that, if you like, is a very, very important consideration when deciding whether to grant or refuse planning permission.

Is that an, so you say that's an additional tool in your armoury, so to speak, as a planner in terms of, you talked about the Town and Country Planning act gives local authorities the ability to protect, if you like, nuisance to neighbours and by being a designated site, as you've described, does that add onto that. In addition to the neighbours, they've not got to damage or disturb the environment that is protected?

Well yes, yes indeed. In fact, it would take the situation from limiting damage to the neighbours by that as I was saying putting environmental conditions on to minimise damage to the environment, take it from that situation to in fact one of total protection. And so that if it couldn't be demonstrated that the sites were not going to be damaged by the proposals then the proposals are very likely to be refused and that would then be grounds to refuse planning permission and that would be grounds to win an appeal. Because whatever the local planning authority does, it can only act within the law and that, whatever actions they take is subject to appeals against refusal and then it's the inspectors decision, who takes a less parochial view perhaps than the local authority and he determines, purely on the rights and wrongs and the law, whether an appeal should be upheld or dismissed.

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Before Hatfield and Thorne Moors became European Designated Sites they were already designated protection areas weren't they?

They were, but English Nature did have a proposal at one time, years and years ago, to remove Triple SI status from the moors and that was a particular battle which was taken on by the principally the Thorne and Hatfield Moors Conservation Society [sic. Forum] and they suspected at that time that there was a hidden agenda, but didn't know what it was, for the proposal to remove Triple SI status from the moors. Now I can't say whether there was a hidden agenda or not, but that was a particular battle which, had it been lost by the conservationists at that time the war would have been over and they wouldn't have known the reason why. This was the argument at the very, very famous meeting at Thorne Grammar School in the, I think it was in ninety seven, nineteen ninety seven, when there was a public meeting about the proposals to withdraw Triple SI status.

Now let's presume that Triple SI status had been removed, that was in ninety seven and then the Natura 2000 legislation, which I didn't know about at the time, was already in the offing, but of course it was enacted just a few years later. But at that time shortly after the enactment of that then Thorne and Hatfield Moors were proposed as candidate SACs and proposed SPAs, I believe that's the right way, one's a candidate and the other is a proposal. Now had Triple SI status been removed from the moors then they wouldn't have qualified I believe as European Sites, because Triple SI status is an endorsement qualification for a, for a candidate European site. I'm sure that some of the conservationists thought later on that that was the hidden agenda. I can't comment whether it was or it wasn't but my view is that had Triple SI status been lost at that famous occasion at Thorne Grammar School, at the meeting then, had it been lost then, then the sites could not have qualified as European Sites and then we wouldn't have had the recent buyout by the government through the good auspices of English Nature, the buyout of the, of the rights to work peat and the peat workers giving the surface and the peat rights to English Nature.

What would, what might have been the impact of losing that protection on Thorne and Hatfield Moors?

Well the impact would have been that the peat would have been worked down to the bottom of the peat working which would have exposed the sand and gravels underneath and then I could foresee an application for sand and gravel underneath it and massive sand and gravel workings under Hatfield Moor at any rate. With no protection as a Triple SI or as a European Site there'd be no planning grounds really for refusal and I can see that there would have been extensive peat working and sand and gravel working at least under Hatfield and certainly peat working on Thorne.

As the District Minerals Planner would there have been anything you would have been able to do to prevent that happening?

The great weapon in the local authority's armoury to protect those sites against any future planning application was the Triple SI status of those sites. Without that weapon in their armoury their ability to protect the sites would have been greatly reduced and would, applications for working those minerals both the peat and the sand would probably have been won, in my view.

So having this protection of the Triple SI, that continued after, it was a decision, the decision was made not to withdraw that Triple SI status?

Yes, English Nature, following the consultation procedure, which I was very involved in at the time as being Case Officer for the moors at that time, I was very involved in that consultation procedure. One interesting aspect of it was that our, when I say our I mean the DMBC's statutory consultees

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were English Nature, but English Nature had a real interest, I don't mean they were casually interested, I mean a real pecuniary interest in the land, they were owners of the surface, they'd been given ownership subject to a legal agreement between English Nature and the peat workers that certainly areas of it would be worked for peat. So because of that particular pecuniary interest in the site I felt that their consultees position was damaged and so I recommended to my Director that we should go out to consultation to the, what we call the NGOs, the Non Government Organisations, which is, was principal, principally the, the individual membership bodies of the Thorne and Hatfield Moors Conservation Forum, bodies like Yorkshire Wildlife Trust, and all the wildlife organisations such as the RSPB and Doncaster Naturalists, people like that and we informed them individually of this consultation procedure and they all contributed towards it.

But, yes that was a very, very important time I think for the moors and the outcome of that consultation, that's English Nature consulting the local planning authority about proposals to denotify the Triple SI status, the outcome of that consultation process was to preserve the Triple SI status of the moors. The reasons was for wanting to denotify it was again the argument that there's nothing there, all the surface of the moors was stripped bare of any vegetation or invertebrate interest and were kept in that condition for up to twenty five years. I mean basically they, they worked a few, they milled a few millimetres, a few centimetres of peat off the whole of the surface every year and so it looked like a ploughed field all the time, sort of three, four miles across. But unlike a ploughed field it didn't go through the season like a crop growing and being green and then ripening and being reaped and then ploughed again, it just stayed looking like a ploughed surface for twenty five years with not a blade of grass or heather growing on it. So basically the wildlife interest was lost, at least that was what was proposed. But the conservationists took the view that it could be restored and that was the view that won the day.

Thank you very much that was well covered for what I wanted to ask you.

Thank you.

[Recording Ends]