| **INT:** | **Just ask your consent. Brilliant, so just to start off with, if you could just talk to me about the organisation that you work for and your role within that.** |
| --- | --- |
| DEU30: | Okay, I work for [local government]. It’s a District level local authority. It sits in a two-tier system currently with North Yorkshire Country Council being the strategic role if you like. But the key area that I’m involved in is planning and District Councils are generally involved in planning for most issues. The exceptions are things like minerals and wastes and highways, issues which are dealt with by the County Council. Interestingly there are currently proposals, you may be aware of, for a unitary system authority to be brought in. The Government’s just been consulting on that. It seems likely that we will have a unitary authority across North Yorkshire and York within the next couple of years.  My role, I’m the Principal Ecologist. That is to say the only Ecologist within [local government]. I sit within the Planning Department and that’s where the majority of my work is, although I do assist out with other aspects of local authority work that involves ecology, so occasionally assisting people like our Parks Department with land management issues. We do own small arcs of land, some of which is managed for nature conservation purposes. And there’s a Countryside Education Officer in post who deals with that side of it.  So, my main role is within the planning system, so it’s looking at planning applications when they come in. Assessing ecological reports, or whether ecological reports are required or not in some circumstances. And then advising on planning conditions and well first of all, advising whether from an ecological point of view, an application’s suitable to go ahead. But assuming that it is, then advising on appropriate conditions to make sure that we’ve got mitigation, compensation in place, in respect of both species, protected and priority species, and habitats. |
| **INT:** | **You touched upon focusing on minerals and waste, do you collaborate or a relationship with sort of corporate businesses then?** |
| DEU30: | Yes, I mean the minerals and waste is quite an important issue in [Town] District. For instance, in terms of bio-diversity we’ve got quite a large number of minerals, active minerals working. Tend to be things like gravel pits and a lot of the restoration of those sorts of things makes a big contribution to the biodiversity of the District. You know, disused gravel pits provide obviously water bodies for things like birds, but also all sorts of other habitats as well which can be created on those sites once the mineral function has finished.  The principal role in dealing with those is through North Yorkshire County Council, who have their own Ecologists. But yes, I work quite closely with the Ecologists at North Yorkshire County Council where there our issues overlap. |
| **INT:** | **So, in terms of the species record data that you use, you talk about protected and sort of rare species, do you focus on these predominantly or a wider range of--** |
| DEU30: | Well, basically, because I’m primarily involved with the planning system, the requirements of the local authority are to make sure that we operate in accorDEU30ce with the relevant legislation, which tends to be, you know, the protected species and National and Local planning policy. So, national planning policy is primarily as set by the National Planning Policy Framework which has a section on the natural environment, including ecological matters. That looks primarily at, I suppose-- the legislation deals with the protected species aspect of things, the planning policy tries not to duplicate that but there are areas of overlap where, you know as a local planning authority we have to take into account the potential, presence of protected species and priority species.  And so, the focus tends to be on those species, the focus tends to be on things like bats, great crested newts, badgers, breeding birds. Other, you know there are some other things that are included in that. For instance in [Town]District, we have a plan called [species] which is quite a rare species which is listed under the Wildlife and Countryside Act and given protection under that Act.  But yes, that’s the main focus. I guess in terms of species, I’m aware that there are other species which are impacted by planning, but you know, we have to give weight to planning policy and legislation when we’re making planning decisions. So, you know, quite often things like-- if you’ve got great crested newts in a pond that might mean that that pond is then protected, and that not only protects the great crested newts it protects lots of other associated species, dragonflies etc., etc., that go with that. So yes, the focus is on protected species, but I hope it’s not a narrow focus on protected species.  And the other side of the coin is that we also are concerned about habitat, particularly priority habitats, and again through the NPPF we’re required to take account of habitats. And obviously with a lot of species if you look after the habitats then you’re going to look after the species. That’s not always as straightforward as that, there are, you know exceptions, but in general I think it’s fair to say. And you know I think ecological policy Nationally has recognised that looking after habitats is the key to protecting lots of levels of ecology, and particularly where you’re looking at that in the context of it being connected and joined up etc. you know, in line with a lot of principles. |
| **INT:** | **Yes, no, that’s brilliant. So, obviously the data that you use informs your decision from a planning perspective, does it inform any other decisions at all, in your work?** |
| DEU30: | Yes, I mean as I say I’m primarily based in planning but when we look as a local authority who’s a land owner, where we shall need to be aware of species we have on the land and what habitats we have on the land that we’re managing to try and make sure they’re being managed, if not for the benefit of those species, you know because often the management of land is multi-functional for public amenity and other cases as well; but you know we need to be aware of the needs and requirements of species.  And somewhere in the land is managed, you know specifically for individual species. We have for instance a small nature reserve at [place] in [Town], and that nature reserve is a legacy of a planning application from the 1980’s I think it was. When great crested newts were discovered on a planning application site, ponds were discovered that had great crested newts, and because of the protection given to great crested newts we now have a small local nature reserve what has become an area, fairly urban area of [Town]. Which again provides habitat, not only for the great crested newts but is you know an important piece of habitat for lots of other species and also important piece of semi-natural green space within the urban setting. |
| **INT:** | **Brilliant, are you finding that you’re having to focus more on urban environments now as well as sort of the more natural ones?** |
| **[00:10:00]** |  |
| DEU30: | I’d say, as a local planning authority, it is sometimes frustrating that we don’t get involved in some of the bigger issues here that effect biodiversity across the Country. Much as you might like to do because obviously if you’re looking at biodiversity what happens in agriculture and forestry, given the percentage of the land which is occupied by those kinds of activities, it’s mostly outside of the control of local planning authorities. So, you know, there is a sense sometimes that you’re dealing with fragments of that because what I tend to deal with is development sites. Often, not always they’re on the edges of existing settlements because planning policy is usually about developing new settlements and tends to look at overall protection of the open countryside, and maintenance of the open countryside. So, most of the sites I deal with aren’t necessarily urban when I become involved with them.  But we’re often talking about extensions to urban areas. And in [Town]District that’s [Town]itself primarily. But also, [Town] and [Town] are the towns that are having the most major new development. And there’s also a major new settlement planned which is affecting quite a large area of land between [village]and [village], between [Town] and [Town]. And the plans are that new settlement will support something like 3,000 houses. So that’s, you know another room for-- essentially greenfield development. |
| **INT:** | **And so presumably in that development your key to how that’s going on?** |
| DEU30: | Well, I mean ecology’s certainly a major issue in that, you know as you’ll understand there are lots of, you know the driver is the need to provide housing in accordance with what’s laid down in the local plan, which is based on the Government requires to meet perceived housing needs. And then there are other drivers, you know some of them are environmental, so the choice of location for instance is looking at sustainability in the round. So, the fact that there’s access to a railway line’s a major consideration in the location of the new settlement.  But yes, I think it’s fair to say that ecology is one of the factors which is given significant consideration within the decision making in that area. |
| **INT:** | **Absolutely, no that’s great. In terms of-- just looking a bit more at the data that you collect, where do you obtain your data from? Do you collect this in-house or--?** |
| DEU30: | Not primarily. The primary source of data for planning applications is there’s a requirement which impacts on pretty much all major applications and some smaller applications where, you know smaller applications I’m thinking of things like barn conversions where you might get bats or nesting swallows and things like that.  But for these applications, when the application comes in the local authority asks for an ecological survey to be undertaken. That ecological survey is generally undertaken by ecological consultants who are employed by the developer. And they will do a desktop survey, which we would generally expect to consult with the main source of information that are published on the web and with organisations such as North and East Yorkshire Ecological Data Centre. And then they would also be expected to do at the very least an initial walk-over survey and, depending on the scale of the development, then that initial survey may well say, “Actually we need to do more detailed surveys for particular species.” You know bats, great crested newts, nesting birds, whatever; whatever that might be that’s picked up from the initial walk-over survey.  So, that really is the primary information base that I use when I’m assessing planning applications. |
| **INT:** | I’m not fully aware but with the walk-over surveys and the ecological survey, is the data that you get, is that as a raw data product or is it processed or mapped in any way for your use? |
| DEU30: | No, it’s usually processed. It’s usually the Ecological Consultants will undertake the surveys, they usually write the survey up, they will provide a summary of what habitats and species they have on site. They will use, they will produce a, usually what’s called a phase-one habitat map. To some extent that has been a bit super-seeded because we now have a new system of habitat assessment which is the UK habitats, I’ve just called it UKHabApp. But it’s a system which has been designed, which has been designed more specifically to work directly with the biodiversity audits which have been brought in as part of the Governments proposes for biodiversity net gain.  And that’s something that we already asked for that for major developments. We have a planning policy which requires for major applications, say they need to demonstrate that they can meet a no net biodiversity loss requirement. So, we ask them to use the DEFRA metric, which currently is version 2.0 Beta Test state. We’re anticipating that at any time, this spring apparently, we’re eagerly waiting on the update. Again, that’s largely habitat based. And you’d be aware I guess that the philosophy of that tends to be that if you look after the habitats you look after the species. There needs to be plenty of caveats for that, but you know, I think it’s generally accepted that as a starting point that’s good, but that doesn’t mean that you cannot give any consideration or attention to species. |
| **INT:** | **Brilliant, you touched upon biodiversity net gain, and obviously with the Environment Bill how do you think this will change and would this effect your work in any way, in terms of the data that you use?** |
| DEU30: | I think because we already have a policy which asks for the metric to be completed through our no net loss policy, I think we’re already seeing an improvement in the quality of the data, because you know you could argue that there’s lots of grey areas which are open for interpretation within the definitions of the habitats and the conditions, and all those sorts of things. Which I think is true.  But it does mean that, I think we’re having to pay more attention and consultants are having to pay more attention to what’s already on the ground and how you justify looking after that, either on site or potentially through offsetting. Although we haven’t as a local authority, the policy’s only came in about a year ago. And we don’t have any tailor-made offsetting solutions at the moment. Most planning applications, major applications are looking to achieve the majority of biodiversity credits they require on site. And some are having some difficulties with this, and there are then, getting into all sorts of arguments as to what quality habitat you can realistically expect to provide on housing developments and all these types of things. |
| **INT:** | **No, that’s--** |
| DEU30: | Sorry, I was just going to say the other sort of conceptually related development that we’ve just moved into, with great crested newt District Licensing, which I don’t know if you’re familiar with that, but-- |
| **INT:** | **Yes partly, a little bit, but yes--** |
| DEU30: | Okay, but there’s a bit of a similar philosophy, you know which is based on the idea that there’s potential win-win for developers helping newt conservation instead of trying to squeeze potentially unsuitable great crested newt habitat on to housing estates that are going to be well used for amenity and there’ll be dogs going in the pond and all this sort of thing. The idea is that you offset that and so the idea is that it’s good for great crested newt conservation in the long term, and it’s cheaper and easier for developers to look after great crested newt conservation in that way than to do lots and lots of very laborious trapping of individual animals. |
| **[00:20:00]** |  |
| DEU30: | So, that’s something which Natural England have just introduced within the last couple of weeks within [Town] District. It might be [Town] as well, I’m not absolutely certain about that. Anyway, it’s several Districts across Yorkshire and York might be with East Yorkshire, that is expected to follow in the next few months. |
| **INT:** | **Yes, in terms of sort of this idea of offsetting, is this only common in great crested newt or is there other species in which this operates?** |
| DEU30: | There’s long been options I suppose for translocation of species in association with development projects. It tends to be not favoured as an option because, I suppose there’s few guarantees of how successful it’s going to be, and you know often a species involved have quite demanding habitat requirements, so if you’re looking at just a translocation you have to be fairly convinced that you can achieve that. So, I think although that has been available it tends to be very much a last resort. Whereas I think the idea of offsetting as opposed to translocation is a more pro-active approach and it’s possibly holistic, in that you’re not just looking for little scraps of land or whatever where you can put things. The idea is that it’s more systematically looking at developing alternative habitats for species and habitat recreation. |
| **INT:** | **Yes, do you not worry, I mean yes, do you not worry that perhaps if this was the case with offsetting, you get developments in places that you otherwise you know would have turned down. And then you sort of-- does that not threaten potential areas?** |
| DEU30: | I think that’s always a concern, I think. So far, I don’t think that’s really been what, how offsetting seems to be operating in [Town]District. I mean it’s very early days. You know, we’ve only had a policy for about a year and there’s very little offsetting going on. It takes time for planning applications to come in through the system, to reflect the new policies, so you know we can’t say that that won’t happen more extensively. But what I would say is in the majority of cases, at the moment what we’re looking at is habitats which previously might not have been given very much consideration are at least earning credits, and they’re having to be assessed and quantified. So, developers are having to say, “Well actually we do need to set aside some habitat.” I mean I’m not arguing it’s working perfectly and that there’s lots of discussion and debate even at this stage over how these things work, you know. In some cases, it seems to work fairly smoothly. In others, you know I think there are areas for improvement and that’s one of the reasons, I think everybody is hoping that the final version, version 3 of the metric will address some of these issues as Natural England has promised it will do.  So yes, it’s a possibility. You know I think there’s-- worries also go beyond just the concern for biodiversity but also people’s relationship with nature. So, we don’t want a situation where all the potential biodiversity value of a site, and it might be quite an extensive site, is then offset somewhere. People need to be able to appreciate nature and be close to it.  But there are other requirements in terms of green infrastructure and things like that which hopefully also come into play and get some kind of balance. You know, it tends to be the cheaper option for developers to try and put the biodiversity value on their development site rather than looking to find the resources to put it elsewhere. But then there’s always a temptation they might try and squeeze to much in and not take account of the fact that, if for example you want to try and get your biodiversity credits and you make all the open space within your development wildflower meadow where the kids going to play? Where’s the kick-about areas? You know, there has to be a balance in these things. So, I think we’re very much at a learning stage. |
| **INT:** | **Yes, that’s very interesting. You talk about in terms of the data and that it’s processed from the Ecological Consultants, do you do any further analysis of that yourselves?** |
| DEU30: | Depends what you mean by analysis really. I mean, I certainly review it. I use my local knowledge and what expertise I have to access whether it’s, you know, whether it’s likely to be a full and accurate description of the ecology on site. Sometimes I will check records with the North and East Yorkshire Ecological Data Centre. And, although I don’t have anything like as much time as I would like to go out on site and do site visits, I do do that. Particularly for the larger developments, or more sensitive developments. And I use my own knowledge and experience to see if what’s being proposed in the assessments appears to be an accurate reflection of what’s on the ground. And sometimes we’ll go away and ask for further clarification or further updates from consultants, if we feel that that data isn’t of an adequate standard. |
| **INT:** | **And you talk about your local knowledge that you use and I’m sure this is integral to your work. Are you finding this is being disrupted with varying climatic changes that are more prevalent now?** |
| DEU30: | I mean, that’s a difficult question I suppose to answer. I’m aware that there are certain species of birds that are now seen more commonly in the District that weren’t seen twenty years ago. And the same with insect species and things like that. Some of the other large-scale effects of climate change, I think are going to take time to filter through. And the impacts probably need to be assessed on a wider scale than what I’m talking about typically with planning applications.  But you know-- I mean-- I guess if you look at things like, I suppose you could look at things like tree disease, there appears to be an element of that associated with climate change as well as with the transport of pests and things like that. So, I guess invasive species are a more obvious human impact on, that you can see changes in the course of a few years. |
|  |  |
| DEU30: | But you know, I think we do need to be aware of climate change happening at the wider scale and when we’re looking at things like trying to use offsetting to try and overcome fragmentation in some cases, so we’re looking at trying to guide where offsets might occur to link up habitats, that’s an important issue. I suppose from the local authority point of view, although it tends to be lead by our Arboricultural section within the Parks Department, I think when we’re looking at our involvement in things like the White Rose forest and tree planting, some of that is obviously driven by trying to achieve carbon offsets. I’m quite keen that those are not just a matter of planting as many trees as you possibly can and get as much carbon as you can. But that it provides a multi-functional and if it’s in terms of biodiversity and amenity and all the rest of the rich benefits that tree planting can achieve, then I think we need to avoid just a narrow focus on just, how fast can we sequest the carbon. |
| **INT:** | **Absolutely, no, completely agree with that. That’s brilliant. How do you deal with data gaps when you’re interpreting the data?** |
| DEU30: | Well, I mean, yes there are often lots of data gaps so, I mean the first approach really is to ask for surveys, but you know, that might apply to a specific site it doesn’t necessarily approach to wider, you know how you place those in the wider context, and that is more difficult. Local authority budgets are very restricted at the moment, and so our ability to commission surveys or do those sorts of things is much less than might previously have been the case.  So, I think for example, we’re involved in designating sites for important of nature conservation which, in this area are, the review and the process of that is led by the North Yorkshire SINK Panel, of which we’re a member and chaired by [County Council], [City Council]’s also part of that.  Previously one of the major areas where we would look at gathering data was undertaking surveys, or SINKs, or potential SINKs. And there used to be money through North Yorkshire Country Council which was available for being proactive in doling out and, if areas which were potentially of SINK quality were brought to our attention. We would engage professional surveys to go out and do surveys. But it’s fair to say I think, the main criteria on which the SINKs are designated tends to be plant communities. We work to a set of guidelines which includes all sorts of other species criteria, but the main ones are the plant community criteria.  And you know, ideally, we would be in a position where we could regularly review that data and we could make sure it was up to date, and we could survey sites that require surveying, or which have been brought to our attention as being potentially of that kind of level of interest and see if we can get them surveyed and designated if necessary. And ideally as well then, we would also like to get involved in discussions with landowners about how encouragement might best be undertaken. Unfortunately, we’re very restricted in all of those aspects at the moment due to budgetary constraints, and have been for over the last ten years or so. I don’t know if there’s much-- very much sign that that’s going to change.  There are areas where, probably 50% of [Town]District, or nearly 50%, maybe 45% or something like that, of [Town]District is within [Area] AONB, and Nidderdale AONB have a little bit more capacity than we do to get to involve volunteers in going out and taking some surveys. So, in recent years they’ve had lottery funded projects which have involved citizen science and those kinds of things. Part of that has been training up volunteers to look at various things including taking botanical surveying, some of the things they’ve been doing is going and looking at some of the SINK sites and resurveying them and things like that. So, across parts of the District, we do have some impact which is, or some resource, which is basically volunteer based. But across most of the Local Authority we don’t have the resources to operate a volunteer schemes on that kind of scale.  I suppose from the point of view of species it’s interesting that one of the other things that the AONB were doing was working with Leeds University on looking at habitat suitability modelling. So, they were using citizen science volunteers to go out and do surveys within the AONB, and the Leeds University were doing some analysis on those to see what the predicted extent of species distributions might be. |
| **INT:** | **Yes, no, that’s brilliant, and just in terms of the resolution of data that you use from Ecological Consultants, do you require a particular scale, or does it depend on obviously the project or planning application that is in question?** |
| DEU30: | Yes, it depends on the planning application. I mean, most planning applications tend to be fairly small-scale. You know, it’s a large application if it’s more than two or three fields. So, that’s the kind of resolution that we ask for.  I suppose some of the other issues with resolution are things like temporal resolution could be a problem because quite often you’ll get the surveys are done at what might not be necessarily be an optimal time of year. And so, that effects quality of the data, and sometimes we’ve just got to live with that. Most habitats can be assessed to the kind of standards required by the professional bodies, the CIWEM etc. Within their survey standards.  But that can be deceptive on occasions. I have certainly known of sites where a phase-one type habitat survey has been done in early spring and then it’s missed some quite interesting plants that have only become apparent on site later on in the year. |
| **[00:40:00]** |  |
|  | Bats are interesting because bats are obviously also seasonally dependent in terms of the surveying to an extent. There’s a certain amount you can do from having building surveying, building inspection survey done, which gives you a fair indication of how likely buildings are going to be used by bats. But because bats are-- well I think they are still called a European protected species, just for the moment. But because they are, and you know they have a quite high survey requirement, a quite high standard. So quite often, if we feel we don’t have the correct information in regard to bats, an application may well in practice have to go on hold for four or five months waiting for the survey season before it can be taken forward. Because sometimes certain information on bat activity that you can only obtain at certain times of year.  Whereas other species and now I’m thinking of things like swifts, which are only active and breeding in this country between May and August. They aren’t given the same kind of level of protection and we aren’t able to require the same level of, you know we wouldn’t be able to, in most cases put applications on hold for that length of time on the off-chance there might be swifts nesting at a sit. So, that sort of thing is a data gap where, you know, conceivable that citizen science from local naturalists who are aware of where the swifts are nesting etc. could be of great help.  Some of the other issues are that you know we get an awful lot of planning applications in [Town]District alone, I think it’s about 3,000 a year, but I’d have to check on that. But anyway, it’s a large number and I can’t be involved in looking at all of those. So, you know one gap then is how do you alert the planning system that there may be species data. So that’s straightforward enough for certain designations for instance, like SSSIs and SINKS, we have those mapped. When a planning application comes in then there’s an alert there effectively which says go to myself for consultation or if it’s SSSI it would also go to Natural England.  But how do you manage that? Cause Natural England have tried to look at impact off site as well, in terms of their SSSI risk zones that they publish, I don’t know if you’re aware of those. But that has been a useful approach, but probably not fully automated I don’t think in the way that it could be so that that, because it’s quite complicated, you know different applications for different uses would trigger potential need to consult Natural England at different distances from SSSIs. So, it’s a little bit complicated but I’m sure it’s not beyond the bounds of what GIS technology could be programmed to do.  And I suppose, as I say the same thing then would apply to species data, you know we don’t have-- so for instance, if data is passed to the North and East Yorkshire Data Centre, following ecological surveys being undertaken on-- I think that’s increasingly happening, it certainly doesn’t always happen, that Consultants pass their information on species records on to the Data Centre. But where they do the Data Centre then hold that, and what there isn’t really is a good system for that being-- so say it’s-- I don’t know say it’s a barn conversion and that conversion’s been done and there’s been mitigation put in for bats, then we would need to know about that next time there’s a planning application that effects that building. But that’s-- one of the gaps is we don’t really have a system for alerting us to that, other than the Planning Officers look out for it if they’re aware of it, and I would look out for it. But you know we don’t have anything systematic which says, you know, “Yeah there’s protective issues with this particular site.”  So yes, that is a gap. It’s something the Data Centre has tried to look at in the past, but-- I mean, primarily I suppose where we rely on it is the Data searches that we ask for from ecological consultants. So, for major applications that should get picked up because pretty well all major applications will go through to the Data Centre and consult them and the Data Centre will provide them with information on protected species records within a certain area. And I have access to Data Centre species information as well, so I can check if I need to do. But it’s just that, what happens with you know the smaller applications where things could easily get missed. |
| **INT:** | **Yes, absolutely. I’m just sort of-- so we’ve sort of established these data gaps that exist, how would you consider accuracy of the data over the completeness of the data?** |
| DEU30: | Well, I suppose if data isn’t accurate then it’s not much use whatsoever. So, it is important but I-- in terms of most of the protected species that we deal with, I don’t know about accuracy, species identification tends not to be too much of a problem in terms of things like bats. Even if the data isn’t completely accurate in terms of species, because bat species are very difficult to identify even with bat detectors, you’re not necessarily going to identify definitely to species. You can get some indication, some species are fairly clearly identifiable from the calls, others aren’t. But the fact that there are bats at a site, the main thing is, we need to know that there are bats there, and if we know that then you know we can get consultants in to do the necessary work to confirm the identification. And that’s usually required in terms of licensing as well.  So yes, I mean newts. Newts is the sort of thing where we quite often get members of the public concerned about newts, and we might ask them to send us a photograph. And quite often people say they’re crested newts, it might turn out to be a smooth, a male smooth newt which has got a, you know people don’t realise they’ve got a quite extensive crest during the breeding season themselves. So occasionally we get information like that. But that’s, it’s not too much of a worry.  I guess that the thing is we don’t have, you know we don’t have the level of information we would like. And it’s been quite interesting, Natural England did quite a bit of survey work in establishing the great crested newt licensing system. They surveyed, I think it was about 100 ponds across, I think it was [Town], [Town]and [city]. So, the survey, they did quite a bit of survey work, and they’ve done modelling based on the results of that. And I haven’t seen the final versions of the modelling but it is interesting that that modelling left quite a lot of gaps that I had local knowledge that we knew where there were great crested newts that wasn’t being picked up by the modelling. In fact, particularly around, areas around towns which, our information tends to be the areas where more development is likely to happen. So yes, they’ve now taken the data that we had, which is with the Data Centre and integrated that into their models, but I haven’t yet seen those final marks. I will be interested to see those.  But yes, it does mean that, if you’re looking at things like great crested newts in terms of development, there’s impact on the ponds, and if there’s a pond on a development site it’s fairly straightforward to get Consultants to go out and survey for that. And that’s been made quite significantly easier recently with e-DNA testing. Which is, you know just requires a single site visit in most cases. |
| **[00:50:00]** |  |
| DEU30: | But what is more difficult is where you’re looking at potential terrestrial habitat, and quite often the pond might be off-site. So, you’ve then got an issue, do the Consultants actually bother to ask adjacent landowners for permission to survey? And I think sometimes their clients don’t necessarily encourage them to do so. But we also occasionally get, you know adjacent landowner may well refuse permission to go and survey. So, that’s another form of data gap that we have.  And I suppose when you think about it, you know the level of information that we have for something like great crested newts is much, much higher than it is for, you know virtually any other species that we deal with, so the whole of the rest of biodiversity, the data is in a much more parlous state than it is for great crested newts. |
| **INT:** | **No, that’s brilliant, that’s really interesting. I’m just conscious about time, are you, have you got another meeting to go to?** |
| DEU30: | I don’t, I am fairly busy though, so-- |
| **INT:** | **Okay yes, no--** |
| DEU30: | I’m okay for a little while but-- |
| **INT:** | **Brilliant.** |
| DEU30: | I guess one of the other things in term of data gaps where, you know there’s opportunities to make up some of those gaps is some of the issues with local natural history recording, so that we know that there are organisations, in [Town] District there’s [Town] District Naturalist Society and there’s organisations like Wharfedale Naturalist Society, and you know the Data Centre and the Yorkshire Naturalist Union have made efforts to try and make sure that that data can be used.  You know, primarily it’s collected by people as naturalists interested in finding distributions and what’s where, etc. They don’t necessarily collect it in a form that’s readily assimilated on to the Data Centre’s data basis. So, I think-- I think it’s fair to say that a lot of the initial suspicion that there might have been between Naturalist Societies and the Data Centre, Why do they want to use our data? And why should we give them our data? And all this sort of thing, I think a lot of that has gone because the Data Centre has made a good case that, you know having that information should help in better decision making for nature conservation. But there’s still quite a gap between that and then, you know getting those observations from the Naturalists on to the Data basis that are held by the Data Centre.  And another area of contention is some of the national organisations sell their data commercially, and don’t necessarily make it readily available. So, things like the BTO records, when they do National surveys and they don’t necessarily make that, the local contribution from those National surveys, they don’t necessarily make that available to the Date Centre, which would be very helpful if it was. For whatever reason they don’t. So, there is this thing that lots of different organisations hold data, and you know the idea is that the local Data Centre would be the key one that, if everybody knows there’s one Data Centre and everybody uses it and consultants and local naturalists, and national societies and everything like that. We’d have much better access to what data there is. And there’s still I think issues within that. And I understand, you’d have to talk to Simon about that, but I think there’s even issues as regards the NBN.  So, for instance we try and discourage consultants from just using NBN data when they’re doing their desktop surveys for sites because it tends to be more locally specific, better resolution etc, if they go to the local Data Centre. |
| **INT:** | **That’s brilliant, that’s great. So, obviously in terms of communicating your data and the results that you get from the consultants-- obviously this goes into planning applications, do you share it with any other audiences in any other formats at all?** |
| DEU30: | Well, all ecological consultants reports, with the exception of sensitive data, is published on the Council’s website. So, we’ve got a Public Access website for planning applications, and all of the ecological reports for that would go on, with certain exceptions. So, for instance, that refers to precise locations of badger sets, we would redact that because badgers are open to persecution. It’s not to say that the sorts of people who persecute badgers are going to read about it through, you know they’re going to get the source of information elsewhere, but you know just as a precaution we tend to, we try and redact that information where we can.  Otherwise, it’s public. I do consultation responses to applications, in which you know I sort of summarise sometimes conclusions of the surveys but more importantly I guess what it ends up with is the planning conditions, the recommendations for approval or not, and then the recommended planning conditions.  So, that all goes on the Public Access website. And again, we sometimes get information on the Public Access website from members of the public saying, “Have you considered there are bats around this development?” And those types of things. |
| **INT:** | **That’s great. So, we’ve sort of-- I think we’ve discussed this quite a lot in terms of data gaps but just briefly how could the data be improved to help in your decision making? I think you’ve given me a suite of examples already.** |
| DEU30: | Yes, you know I mean, there are some areas where we don’t know very much and we just have to hope that the habitat information is going to help look after species. You know there are a lot of things like invertebrates, we know virtually nothing about the distribution of them locally in any detail, you know. If I were to produce a map on a 10km square where they’ve been recorded, for some of the more specialist species you’re just going to record where the experts live. You know that but that’s probably also reflected locally as well. So, I think you know with somethings, fungi is another one. You know we really don’t utilise information on fungi at all. It might depend on habitat or there could be other issues, so--  I suppose a classic one in terms of where there’s a gap between the habitat and the species is things like farmland birds. So, if we get an area which is arable, part arable field or improved pasture, even in those circumstances you’ll sometimes get ground-nesting birds like lapwings and occasionally curlew. And you know, you’re not going to be able to compensate for that on site with amenity grassland or wildflower meadows within a development site. And those sorts of species are not specifically considered within the biodiversity metric either.  So, that’s another gap perhaps where there is sensitive species that fall between the stools. You know ideally, where you have a situation like that, you’d be looking for a contribution to offsetting somewhere perhaps. Most offsets it’s probably desirable to have public access because you know the consideration of giving people access to nature is an important one, not only for people but also in terms of what’s the incentive for conserving nature in the long run. And getting people close to it is probably one of the best-- one of the best ways of doing that. |
|  |  |
| DEU30: | But then there are things like curlew and lapwing, you don’t want them where there are lots of people and dogs. They want to be, you know there might be a case for saying that offset is better off you know somewhere on farmland where there isn’t public access but where the farmland might be managed better. And at the moment there isn’t that mechanism.  But to say about fungi, I suppose, another interesting issue with data is veteran trees, and how are veteran trees identified and recorded. And how are their particular interests looked after within development and that again is something where we rely on information held, the Data Centre will hold some, but then there’s also data bases held by the Woodland Trust, the Ancient Tree Forum, people like that. But I think quite a lot of that gets missed, and quite a lot of tree work would be covered by our Arboricultural section. I wouldn’t necessarily get consulted by it, so again there might be times when there’s trees which are effectively habitats within their own rites, might support things like nesting bats, nesting birds, rare fungi, all those sorts of things. They aren’t adequately recorded and flagged up yet either I don’t think. |
| **INT:** | **Yes, that’s absolutely brilliant. Thank you very much. So just finally, for the last 10, 15 minutes if that’s okay with you, we’ll just look a bit more at model data. So, how would this effect how you’d interpret the data if you were to use model data in your work?** |
| DEU30: | The only time I’ve used that kind of model data is with some work that’s been done with the University on bats within the AONB. And I have used that occasionally in terms of asking for further surveys so, we are only, we’re required as a local planning authority to ask for ecological surveys where protected species might be impacted, but we’re not, we’re required to do that in a reasonable way and only do it where there’s a reasonable likelihood of the presence of a protected species. So, we’re advised not to incur unnecessary expense and time delays and things for developers if it doesn’t seem very likely that a species would be present. So, I have used it sometimes with bats in areas where perhaps it might be debatable whether bats would be present. Bats tend to not be very prevalent in upland areas, and I have used some of the Leeds University modelling in some of the more marginal areas where I think it’s quite likely that there would be bats even though it’s fairly upland, you know it’s not completely an exposed area, there are trees and elements of habitat, and Leeds University have produced some model data which has been detailed enough for me to be able to say, “Well look, the model showed that bats would be likely so you do actually, do need to do a survey under these circumstances.”  How much more widely that could be applicable, I’m not sure. I mean, any improvement with data is going to, is something which would be welcome. And I think that that issue of, well, where do we require surveys? Is an important one. And it’s one where we have a thing called Validation Criteria. So, when a planning application is validated, we go through a check box, which is something produced originally the Association of Local Government Ecologists, I think helped develop it and it’s got lots of boxes that you tick when you fill in a planning application. The idea is really to give the Local Authority an idea of whether to require surveys or not. And there’s quite a lot of problems with that because you’ve got a list of about twenty boxes which need a tick in. And a lot of planning agents just simply tick no to everything, just routinely. So, some of that, some of them should know better, sometimes you know you can sympathise with it because it seems so onerous to go through and a lot of the time non-experts are in a position to say, “Well have you got species rich flower meadow, or something like that on site.”  You know, we’re trying to identify perhaps where there might be something which flags up a requirement for survey, because most of the developments we deal with it will be on either improved pasture or arable land on the edges of settlements. And it’s often not particularly high biodiversity value, but we need to know you know, is there an area where perhaps there might be a small piece of fen or, I suppose woodland’s easier to identify and you know you can pick those sorts of things up fairly easily on an aerial photograph or marked on Ordnance Survey maps. So, some of those sorts of things are easy to see, others are less so. So, I think things like habitat modelling would be useful in terms of identifying validation requirements. So, where we’ll be able to say, “Look we need an ecological survey.” Even if it’s just for a small application, because there’s potentially sensitive habitats nearby. And that’s not always apparent to us. |
| **INT:** | **Okay, brilliant. So that would affect your decision making in that sense.** |
| DEU30: | Yes, it could well do. And we try-- we just sort of dipped our toes in the water a little bit with that kind of thing. Without-- we’ve developed-- as part of our no net loss requirement, and in association with the biodiversity metric, we’re trying to identify areas of strategic significance. That’s one of the categories which is-- is flagged up in the metric. And we use-- we work with the Data Centre, we work with Simon quite closely in trying to identify some habitats where we thought some habitats were. So, it was partly identifying where we thought there were significant areas of habitats, basically it’s woodland and grassland were the key ones. And we used remote sensing data from the [RESEARCH ORGANISAITION], and [Name] was able to break that down to us, take their data which is freely available for non-profit organisations. He was able to take that and do some work with it. So, we came up with a-- some form of networking map of where we thought the key habitats were, with the idea that we’d then be able to look at where the key gaps were so that if we get involved in offsetting we can then say, “Look these are the areas where you’ll get extra credits.” In effect, you get more value for using your credits in an area which has been identified as requiring these habitats to help link networks.  So, we looked at it slightly differently from the National scoring I suppose, because the National score, what we were looking for was areas where perhaps there wasn’t a huge amount of a particular habitat, but-- so we didn’t want to create, necessarily create for instance heather moorland in parts of the District which are upland, which have got massive amounts of moorland anyway. So, we were trying to look for those intermediate areas where there was sufficient habitat that we thought it makes sense to develop connectivity, but not where there was so much that we thought, you know it would be fairly pointless. So, we were trying to focus on those intermediate zones. And it is just-- it’s just a first applicate really but that is available to look at on our website if you wanted to have a look at that. |
| **[01:10:00]** |  |
| **INT:** | **That’s brilliant, no that’s great. So, just finally, quickly I’m just going to show you some examples of some model data that part of the Team have created. And I’ll just ask if you can interpret them, and then whether you understand them, and then also if you’d find them useful? So, I’m just going to share my screen quickly. So, hopefully you can see that now.** |
| DEU30: | Yes, I can. |
| **INT:** | **Yes, brilliant. This is a model data output. So, it’s for five-spot burnet moth. And on the left you’ve got-- I don’t know if you can see my mouse here, on the left is a raw probability distribution model for this five-spot burnet moth. Are you able to interpret that at all, and whether you find that useful as well?** |
| DEU30: | Yes, I mean my interpretation without seeing the key would be how I’d expect the green areas to be areas where it would occur most abundantly, and the redder areas, the pale, I would interpret the pale pink as the areas least likely to be found. Yes, I mean from my particular point of view from a planning application, I mean there’s a couple of factors. One is that, although I think that burnet moths are possibly a good example of where we’d be looking at the habitat rather than the species perhaps-- |
| **INT:** | **Yes, of course.** |
| DEU30: | Because we wouldn’t be surveying probably down to that level of individual species, but you tend to only find burnet moths where you get barely unimproved grasslands, you know with lots of diverse range of flowering plants. So yes, I mean the scale again, it would be an issue from the planning point of view-- |
| **INT:** | **Yes, of course, absolutely--** |
| DEU30: | As well, but yes, in principle, certainly I would find that information useful. |
| **INT:** | **Sorry, I think we just lagged a bit there. So, now on the bottom left is a-- this is again a raw probability distribution scale model, but at a 5km scale around Wallingford in Oxfordshire. So again, the same principle. At a slightly more localised level would this be a bit more useful to you then?** |
| DEU30: | It would, it would definitely be you know more of what we would be looking for in terms of planning, and obviously we need the ability to overlay it on locations that we were interested in. |
| **INT:** | **Yes, absolutely, that’s brilliant. So now, I’m just going to concentrate quickly on the one on the right. So, this is a variation model, again for the five-spot burnet moth. Are you able to interpret this model?** |
| DEU30: | I don’t know what a variation model is and it’s not immediately apparent to me what it is, no. |
| **INT:** | **So essentially, this model works with the raw probability distribution in that based on the areas where there is a high probability, so if we look at Wales, where it’s slightly darker colour on the variation one, we have the higher the colour the greater--** |
| DEU30: | You’re breaking up there-- |
| **INT:** | **Oh sorry, less-- so the variation model work with the raw probability distribution model. So, if we look at Wales for example, on the variation model the darker the area the less confidence we have in that, the probability of that species being there. So yes, there’s a greater variation and so therefore less confidence. So essentially, this aims to address data gaps, so the areas where you know there’s less confidence in the probability, you’re sort of identifying that as a data gap.** |
| DEU30: | Yes. |
| **INT:** | **With that description, does that make it a bit more useful, or would you not use this in your work?** |
| DEU30: | I may do in principle, I think a lot of it comes down to the fact that what I would use is driven by the requirements of protecting priority species. So ,you know-- if the species were a priority species and it occurred in [Town]District, then yes you know, we might. It’s the sort of thing where we might say there’s a requirement for a survey if you’re basically looking at an area where we don’t have any, we don’t have confidence that there’s any data, then you might say, “Well, we need to survey for this species, ‘cause it could occur but we really don’t know.” |
| **INT:** | **Hello?** |
| DEU30: | --It’s of dualosity.  Hello INT, can you hear me?  Hello INT.  Hello INT |
| **INT:** | **Sorry, so, I think my internet cut out there.** |
| DEU30: | Ah right, okay. I closed down and re-entered. |
| **INT:** | **Yes, apologies for that, it seems to sort of breakdown when I shared my screen. Was there anything else you wanted to talk about those modelled maps?** |
| DEU30: | No, I don’t think so, I mean, I think you know it’s possibly a little bit abstract in terms of what I do on a day-to-day basis. |
| **INT:** | **Yes, of course.** |
| DEU30: | You know it’s-- I guess most of the time, if we have a gap then and we know that there’s a gap then that might trigger the requirement for a survey. However, having said that we would, it would need, we couldn’t ask for surveys unless there was good reason for it. So, you know if there was a-- I mean invertebrates are difficult ones because, you know I don’t have a huge amount of knowledge of invertebrates, and we also don’t have the policy drivers to ask for data on invertebrates generally speaking.  But in theory, if there was something that we thought that we had the habitat present, and it was a species let’s say was a priority species, or somehow had conservation concern flagged up, that might under some circumstances justify specific surveys. I’m trying to think of an example where that might happen. It could happen I suppose in theory in relation to things like tansy beetle, which you know, or you’re probably aware occurs around [town] and possibly just along the [river] as it goes into [Town]District. So, that’s the sort of things where you’ve got a high profile species which is well-known to occur in certain habitats along the river. So, if we had an application along the lower part of the [river] or the upper part of the [river] within [Town], we might ask for surveys. If it was shown, you know if the map of that type was made available to us that said, “Look there’s a good chance there’s tansy beetle here.” Then that could then trigger us to require surveys for it. So, there are certainly circumstances in which it could be useful, yes. |
| **[01:20:00]** |  |
| **INT:** | **Yes, no that’s absolutely brilliant, thank you very much for that. I’m just, finally was, I’ve asked a load of questions that I wanted, which is brilliant, was there anything else that you wanted to ask me at all? Or that you thought that I should have asked you?** |
| DEU30: | No, I don’t think so, I think it’s been an interesting conversation, so I guess what are the outcomes likely to be from your study? |
| **INT:** | **From the study? Of course, so at the moment obviously we’ve got sort of the University of [Town] side and [environment research organisation] where we’re talking to people like yourselves who currently use biodiversity data, and we’re also interviewing recorders as well and just understanding the current needs and sort of data aspirations in the future. And then trying to apply this to sort of model data outputs and tools. They’re currently creating an App at the moment which hopefully will be sort of going live soon. But this is obviously with the findings that we get from obviously talking to people like yourself. We’re trying to bring that together with the making of the tool so that it’s as useful as possible. So yes, that’s where we are at the moment. If this is something that you’re interested in and would like to be kept in the loop, then we’d be more than happy to. And it would be great to be able to get your further insights and perspectives on perhaps maybe the model data outputs, if that is something you’re interested in.** |
| DEU30: | Yes, by all means. I mean as long as it wouldn’t be too time consuming, but I do think it’s an important issue. I think you know having the evidence base for biodiversity is an important matter, and we are often in the situation where we don’t have a good enough evidence base. And I think that’s true even of-- or especially of habitats, the information that we have available. I think-- well there’s a good chance that some of the mapping that Natural England are doing in association with Nature Recovery networks may improve that. But I think even the mapping of National priority habitats is very sketchy and you know if you look at the maps that have been produced and click on the information and look at what’s the reliability of this information, it’s often not very high because it’s very old and out of date and taken from an un-systematic source. So perhaps for me, that level of information, even on the basis of habitats would be a massive step forward. |
| **INT:** | **That’s brilliant. Well, if that’s everything-- well that’s everything from me and if that’s everything from you?** |
| DEU30: | Yes. |
| **INT:** | **Thank you very much for speaking to me, DEU30, I really appreciate your time.** |
| DEU30: | No problem. Okay. |
| **INT:** | **Sorry for running over.** |
| DEU30: | No worries, see you later. |
| **INT:** | **Take care, thanks so much.** |
| DEU30: | Okay cheers, bye. |
| **INT:** | **Bye.** |