INT: So if we just start off with you telling me a bit more about your role within [wildlife conservation] that'd be great.

DEU19: Okay yeah so I’m nature conservation advisor for the London and southeast region so that's Greater London, Berkshire, Buckinghamshire, Oxfordshire, Hampshire, Isle of white, Sussex, Surrey and Kent. So yeah so it's basically acting as a regional ecologist essentially.

INT: And do you work with a lot of people then are you in contact with quite a few people?

DEU19: Quite a few yeah lots of rangers, site managers, external partners yeah.

INT: So, looking at the purposes for using species records data. What species record data, do you use, so this is, including single species or species groups.

DEU19: yeah most of it really I mean we use a lot of protected species data when we're doing our own sort of visitor management or our own land management and building restoration so lots of bat records and things like that, but also, you know just all data really when we're thinking about site management, in particular, especially the countryside sites yeah.

INT: Does this inform a lot of decisions, then?

DEU19: yeah, especially for protected species or places where we've got particularly important populations, or something yeah.

INT: That's great. Where do you obtain your data from?

DEU19: It's a variety of sources, local recorders so volunteer recorders and national schemes and NBN atlas and we have had in the past partnerships with local record centres and we have fewer of those now they're bit more sporadic because it's been sort of just harder to manage at a county basis so mostly it's national data agreements these days.

INT: On the NBN, speaking to a few people that they say they find me and a bit more tricky now less user friendly, is that the case with us oh.

DEU19: yeah I’d say, since it became the Atlas and they've changed, some of it it's a bit hard to navigate your way around.

INT: But you still use it and find it effective?

DEU19: yeah.

INT: that's good. And the data that you do obtain what format, does it come in, is it raw data or has it been processed in any way?

DEU19: it's a mixture so often raw data from schemes. But then we use sort of distribution data as well, that other people have already process like atlas data and that sort of thing yeah so it's a little bit of both and often we commissioning it ourselves as well, so we're getting the sort of generating it too.

INT: that's good. What resolution of data do you use? Does this differ depending on.

DEU19: yeah yeah depending on the use really. where we do generate it ourselves, we just get it as a greater resolution, as we can really you know GPS coordinates.

INT: Are there any instances where a resolution has proved difficulty problem.

DEU19: um yeah whereas other people's data and we've only got access to it and, like one kilometer square or greater it's harder than to actually use it to inform site management or protected species protection, so you end up commissioning stuff yourself.

INT: And once you've attained the data, do you do any analysis of you yourself.

DEU19: And yeah quite often usually in terms of sort of site management really so rather than, at a local scale it's more about site local populations, whereas when we use it nationally, then we're sort of looking at population trends so we're doing analysis, then so it's often done throughout the organization, not just by me, really.

INT: Does modelled data come up at all?

DEU19: not so often at a regional level yeah I mean the more nationally, I would say, but locally is yeah I say the skills aren't really there in everyone to do that sort of thing.

INT: Would you find it useful to use model data that level if you have the skills or it would know.

DEU19: As yeah yeah it would be useful, I mean I’ve seen some of the data that was done by Leeds for working with local record centres and doing habitat suitability modelling and some of that is really useful a landscape scale, particularly if you're sort of trying to do that so strategic planning, but yeah it's yeah we don't we have the skills.

INT: Something that you will find useful yeah.

DEU19: yeah yeah.

00:05:47.130 --> 00:05:50.970

INT: Have you been in discussion with anyone in terms of that.

00:05:51.390 --> 00:05:58.410

DEU19: i'm not really we looked at it for a local projects not last year, because it didn't really happen the previous year 2019 we were looking at biodiversity opportunity mapping and so we were working with a local record Center to model then based on the data sets we all had um but yeah that's sort of as far as we've got with locally doing modelling.

INT: What information do you use to inform your interpretation of the data so, for example, how do you deal with data gaps?

DEU19: um yeah I suppose it's just experience really sort of contextual information you get from knowledge of a species and the habitat it requires so that kind of thing so yeah I guess it's just experience really personally for me yeah or looking it up speaking to other people.

INT: yeah absolutely and in that sense, how do you regard completeness of data over the accuracy of data.

DEU19: And it's often really patchy, you know when you get to certain scales, I mean at a site scale, we can have great coverage for the things people really like to go out and record but virtually no data for the plants or you know those sorts of things so I’d say it's quite patchy across taxa and then moving out to sort of landscape scale you get quite patchy in terms of some of our tenant farms and things like that or neighbouring land where people just don't go and record.

INT: Do you prefer to have a completer to set or a wider range or more accurate and precise data?

DEU19: depends how we're using it really I mean it would for some sites it it'd be good, just to have a better idea of what's there, whether even if we only have that up to like 100 meters resolution really just to give you a good idea of just the variety there for protected species really it's about accuracy.

00:08:11.880 --> 00:08:20.700

INT: And you talk about how a lot of your work focuses on protected species, so the accuracy of data is perhaps more important than yes.

DEU19: yeah yeah.

INT: Excellent.

INT: So with the data when you've processed it do you share it with audiences in terms of reports say.

DEU19: um yeah some of it yeah it depends what we're doing and we we've been involved with citizen science projects where we're sharing stuff online virtually. we try and we put our own data on nbn atlas yeah the trustees use Irecord now as well, so it's more available and yeah it's sort of really depends what we're doing at the time yeah with. Where we’re generating data for some of our own projects, a lot of time we just be sharing that with recording schemes and local record centers or local recording groups, rather than making it massively public because it's you know it's sort of more niche just for BAT survey report for example. I was going to say some quite a few sites use the data we have on the site, say, a recent survey or something in part of the visitor interpretation, so it gets us that way as well, so you know just saying what we've got on a site, or how important is why we're managing land a certain way.

INT: So, it's about informing the visitor.

INT: yeah yeah.

INT: With I record, do you find that that's a huge step in data collection.

DEU19: yeah I think it makes it a lot easier for a lot of people just because it's more widely available than some of the systems we use before. yeah I’m not as au fait, with it, as I am with some of those older systems, fortunately. lots of ranges use it.

INT: Do you share your data with any other audiences, other than the ones that you alluded to already you can think of.

DEU19: yeah just yeah just the other schools recording schemes visitors yeah.

INT: So, in terms of your data aspirations. How could the data you use be improved to help your decision making.

DEU19: yeah be more widely available and actually I think having some investment in generating some of the data as well because it sort of more not well sort of a state level really there's not a recognition that data collection costs and that a lot of the data collection, we have on biodiversity in this country is collected by volunteers in their own time so the sort of the availability models don't always work for everyone, like local record centres, for instance, and then they need to charge for their time to provide access to data to commercial use this but you know you get bona fidely asked for data from people who know researchers and other things, but in those kinds of situations or in situations where the government's trying to track performance of particular species as part of the national schemes, you know there's not recognition that actually costs to generate it there's sort of an assumption in this country, that volunteers do it.

INT: So more investment and encouraging generating of data oh.

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DEU19: yeah more yeah more investment in surveillance monitoring those sorts of things.

INT: I guess that would have to occur to national level, could you start at a local level.

DEU19: yeah probably national I think and outside of our organization as well, in a lot of cases yeah.

INT: Would it be helpful to have data at a higher resolution until or does that again depend on your.

DEU19: yeah it depends on what the what the uses, but I suppose it, it makes it easier if you default to high resolution because it gives you more flexibility.

INT: Is there any additional information that you would find helpful when interpreting data.

DEU19: status information conservation status is really useful and it's just that sort of context again it's like all very well getting a massive download of invertebrate names, for example, but unless you have some context you know doesn't mean anything yeah so that's sort of conservation status and significance is really important.

INT: brilliant and so I’m just going to focus on model data for the last bit. So, how would you feel about using other data, instead of raw data.

DEU19: I think I’d need a little bit of sort of an introduction to how to know how to use it really. And I can understand how it's been generated.

INT: Is that yeah so in terms of how it's been modelled together, yes.

DEU19: yeah yeah yeah not detailed understanding of the model, potentially, but just like that context, again, is, you know how it's how it's generated and what its uses suitable for that kind of stuff.

INT: And by using modelled data theoretically, would you see this affect the type of decisions that you make or by.

DEU19: That’s good question. It could, it could change some of your decisions if you, you know if there are areas where actually don't have the raw data for it but you've got a model that you can apply.

To those areas, it could influence how you manage land or where you look to connect existing bits of land and things like that.

INT: that's great so just as the final part I’m just going to show you some examples of model data that some of the modelers have created and they’ve passed on to me to show you. So initially I’ll just ask if you're able to interpret them. And then, whether you find them useful. And then I’ll give you a little bit of explanation so I’ll just share my screen but. It should pop up. So, on the Left you've got a row probability distribution model. At a national scale, and this is for the six spot Burnett month are you able to interpret that one on the left.

DEU19: and say, is it your left on my left is it very to the one with the hand on.

INT: No, no it's not it's this one.

DEU19: Okay, just make sure.

INT: I didn't know you can see that.

DEU19: Okay.

DEU19: yeah okay just make sure, sometimes people mirror their screens that. It looks like a sort of heat the heat map yeah yeah so I did I would anticipate the green would mean that it's much higher probability of it being present.

INT: yeah absolutely. And would you find that sort of model useful yeah so.

DEU19: yeah it is useful.

INT: This is exactly the same raw probability distribution model but around a point and Wallingford in Oxfordshire it's five kilometres scale is this easy to interpret?

DEU19: In general terms of the sort of colours are that that it without a kind of os base or similar, I find that less meaningful.

INT: Okay.

DEU19: that's really yeah yeah.

INT: No that's brilliant.

INT: So is there anything that you would add to this, but will make it a bit more useful.

DEU19: And well I think it's that context of you know its Walingford and it's five kilometres but I mean what's the landscape sitting under there and costs. Which is calling for that.

INT: It's all about the context that partners this model. So we'll just look at this one variation model, and so this one is less clear but I’ll just ask if initially you’re able to interpret this at all.

DEU19: What does it mean by what variation are we looking at.

INT: So I’ll give you the description and that the modellers gave me yeah so the variation is calculated using a sample of the background data to give a range in the predicted probability. Right and so, for this model, it was run 10 times on 10 different data samples hmm which include some points, whether our target species records and some weather records for other lepidotherar species, but not the target species.

DEU19: Right yeah yeah I struggled a bit more with that.

yeah.

DEU19: yeah.

INT: I mean I’m not an expert in this either. I can't provide you with a bit more information, unfortunately. But no it's good to understand particularly with the raw probability yeah whether whether you find that useful.

DEU19: yeah.

INT: Because I think it's with these models it's important to appeal and be useful for range of audiences for lay people to sort of scientific as well, so no that's great and just one more question on this. Talking about both of them you talks about the sort of context and that sort of details about places is there anything else, that you would add to these models to make it more useful or simplify it in anyway.

DEU19: The yeah I mean the some of the axes are meaningless, and grids I always like just so I know where I am

INT: that's great so I’ll just stop sharing my screen now. that's great I’ve asked all the questions I had intended to ask was there anything that you want to tell me the other perhaps I forgotten.

DEU19: don't think so now, I suppose one thing that it might not be as person to this discussion, but it's just the very dispersed nature of how we manage data. In this country I think that's one of the big issues for a national organization like the trust is that you have often have county data centers and then national data sets and recording schemes and often it's quite hard to tile those up in a nice smooth way So yeah yeah that's a big thing for me working at a regional level is that is often you're talking to a myriad of partners that it might be easy, just to deal with nationally.

INT: yeah is that because operating in different ways, or just because the data overlaps or.

DEU19: yeah sometimes it's overlapping data. But it's also because some of the structures, like local record centres they work on much smaller geographic basis because they're managing the relationships between you know their volunteers that are in their area, so it works really well if you're a volunteer record it's to be you know to work with a local record Center local environmental record Center and it works really well for those sort of smaller organizations like regional wildlife trust, because you have that geographic patch you're interested in, but as a national organization, then it gets more complicated, you know. Just working on a regional basis, you know if I’m working in sort of the West half of our region, you know that seven counties and seven local record centres so yeah it's quite hard then to manage all the data, you want. Absolutely yeah.

INT: So, how would you mitigate that problem.

DEU19: You can, to some degree, through national schemes and potentially through NBN if NBN had a function which I know it sort of looked at, of providing that gateway to local records and local data, you know where it's not just been made available on the gateway or the Atlas already. Because wherever reasons local record centers might have sensitivity around some, but if there's just one gateway to it essentially rather than yeah you've got to have data license with seven different organizations to just have one through NBN sort of thing.

INT: yeah make your life easier.

DEU19: yeah yeah yeah I mean that must be must be the same for research organizations when you're you know you're looking at multiple spatial areas and then find you've got to go to six partners to get the data yeah.

INT: that's an interesting point. Was there anything else you want to talk about.

DEU19: Fine.

INT: So just as one final question and the next stage of the project would involve working with people like yourself to co design model data with your insights and perspectives on its usefulness. But this was something that you'd be interested in so.

DEU19: um yeah yeah um so I spect colleagues national colleagues who've taken part would be as well, and ask us we do it collectively.

INT: Excellent well, thank you very much for taking the time to speak to me.

DEU19: Thank you.

INT: I realized, everyone is busy. And I really appreciate that.

DEU19: And yet, so thank you very much Okay, thank you good luck with the project.

DEU19: Okay, thank you bye bye.