**CONFIDENTIAL**

Date Transcribed: 25.05.2021

Interviewer:

Respondent:

**INT So, I’ll press record. So, the first question is how long have you been doing biological recording and how did you start?**

P01 Right. My very first records were back when I was a teenager and I’d met [Name] on a course at [Village], at the Field Studies Council based there, so he ran a course and then I sent him some records and then years and years later I found out that he’d been included into the BRC Atlas. So, I was – so that was when I started and then I had a big sort of, you know, when I started working I then had a big gap and I didn’t really resume doing any biological recording until I stopped, until I was close to retire, or close to when I actually started to retire.

And I think I really got – I really got interested when we re-did the [county] atlas for [species] which I think was, when was that, 2015 I think it was, 2013 was when it got published and I started to do a load of analysis on records. And then I took over as county recorder.

**INT So, you quite like the data manipulation and data sorting side of things?**

P01 Yes. Well, my collecting records, there’s got to be a motivation so I – so that started and then last year I actually had a paper published in [international journal] with [Name] as my co-author which was about abundance trends in local areas.

**INT So, had you used those kind of statistical methods in your kind of professional life or is this something that you’ve just learnt in your kind of –**

P01 When I first left – when I first started working one of my first jobs, or one of my early jobs was writing computing simulation programmes and that was when we started to do all of the sort of, really quite advanced mathematics at the time. And then of course years later I found out, ah, this is all – yes, I remember this.

**INT So, you could sort of apply that stuff that you’d learnt, that mathematical stuff that you knew as a professional then, that’s really good.**

P01 I’d had some formal training in statistics but, you know, it’s part of applied mathematics it was really with work and when you were writing programmes in those days you wrote all of the algorithms. There were no functions to call. You had to do it the hard way.

**INT You really knew your stuff I imagine. So, had you maintained your interest in the natural world then throughout your kind of years, your working life but not being doing the recording side of things?**

P01 I always loved the countryside so during working periods there was a gap, and I hadn’t really taken that much interest, even though my father kept sort of nudging me, you know, we need to get back into [Species]. You can have my copies of [unclear 00:04:40] when I’m gone.

**INT So, was it just a matter of time then really, just not having the time to do it.**

P01 Just really not having the time, yeah. It’s not having the time and, yeah, and of course early on in your career you don’t have any money.

**INT And we’ve just done some analysis of who’s involved in kind of biological recording and environmental recording and it’s a universal trend. You see this trend of high levels of participation in people in their teenage years and early 20s, and then a massive drop off of people in their 20s and 30s, and then it picks up again, so you’re not alone. It’s a universal trend I think. And so –**

P01 You know, from an academic point of view I always wanted to go into biology but I – in those days you also had to write essays and I’m never good at writing essays, especially under exam conditions, but the one thing I could always do was maths.

**INT So, you followed that route.**

P01 So, I followed that route, I went into IT. And of course, you’re trying to get ahead in IT.

**INT Yeah, exactly and you’ve got to devote your time to that haven’t you. So, now you’ve come back to it is it just [Species] or have you got an interest in a whole range of species, or is it really [Species] that you focus on?**

P01 I do have interest in other species, but [Species] is my thing.

**INT So, do you do record for other species groups or is it just [Species] really?**

P01 I do a bit of ad hoc recording for reptiles because I do some conservation work with ARC, Amphibian and Reptile Conservation Trust, you’re out on the heathlands there.

**INT And you might as well right down what you see.**

P01 And of course the [unclear 00:06:47] like to see the heaths in terms of fire, so then we have to do reptile rescues. So, I’ve also got my GPS in my pocket.

**INT So, if you can see something you can make a note.**

P01 Yeah, if we’re doing a heathland rescue. ARC always want 10 figure grid references anyway.

**INT And then in terms of sort of geographical area that you cover with your, I guess particularly with your [species] recording, is that local to you or kind of all over the county, or a wider area than that?**

P01 It’s most [county]. So, mostly the county, but when I go away on holiday what I do is I’m therefore photographing [Species], and what I usually do is I stick – turn the GPS on in the morning, stick in the rucksack, take all the photographs and then you do a GPS match at the end and I can then do recording that way.

**INT Okay.**

P01 So, I’ve got photographic evidence.

**INT So, is that just on the timestamp then, so you know the time that you took the photo, and you just match that up with where you were?**

P01 Well, the software does it. When you’ve got a thousand photographs you’re not going to go through too many.

**INT Gosh, all this stuff I don’t know exists. And then you have – you’re county recorder aren’t you for [county], for the [Species], yeah, okay. And then in terms of the area that you visit to do recording has that changed over time or has that stayed fairly constant, have you generally had an interest in the [county] area?**

P01 Well, I mean I live in – I mean I was brought up in [county] but of course now my parents are both dead, so I rarely go back, and when I was going back to [county] it was always to visit parents. I did record one or two, but it was all very casual, it was hold that and record [Species].

**INT Just if you happened to see something.**

P01 Yeah, or I could record that, that’s interesting.

**INT And then –**

P01 Sorry, if I’m out – with [Name], when we’ve been out in the summer and we’ve been saying in [county] which is at heathland sites then, yeah, I will go and record all the silks and the blues.

**INT Yeah, nice.**

P01 That’s one of my favourite [Species].

**INT You’re lucky to be down south where you get all the variety that we don’t get up here. And then we touched on this a bit but in terms of motivation, so what is that kind of motivates you to do your recording of [species] species, is it kind of a personal interest or is it more about environmental protection, or something else?**

P01 What motivates me, good question. It’s always – at the end of the day it is always your – you’re trying to – there’s a general thing about conservation of route species but if it was – what I was doing was sort of studying blues when I was recording there, you know, you try and – I’m recording all the records but also at the same time I’m trying to work out can I predict where they are so I can understand their habitats, so that’s fun. You set yourself a challenge.

Then you go up in a nice sort of – and it’s great when you go up to an area and where [unclear 00:11:06]. And then you sort of walk along and you trip over them, ah, there they go, they’re just hiding. So, I like – so that’s nice and it’s all nice to be able to – you’ve got some on the square that haven’t been recorded before.

**INT And do you think your motivations have changed over time in terms of – so when you started –**

P01 It’s also what’s the particular interest.

**INT And how do you – is that in terms of the particular species that you’re interested in has changed over time?**

P01 Yeah, it’s – I mean if you’ve sort of done – if you’ve surveyed one area and you’ve now got a good understanding then you need to do something a bit different. And also, I’m more likely to go to sort of the out of the way places. They get under recorded than to the places that everybody goes to and we’ve got five million records of the same species on the same spot, you know, we don’t need any more records of that, that doesn’t tell us anything. It’s where we – what’s of interest is where are the blanks.

**INT So, when you’re thinking about going out and doing some recording, so what’s the kind of process that you follow, what’s the first thing you think about, is it –**

P01 What’s the weather.

**INT Yeah, am I actually going to see anything.**

P01 Is it [species] weather or not, so that’s the first thing. So, you always look, you know, I do a now cast, look out of the window, see what the temperature is doing, see what the wind is doing and then decide what I’m going to do. I mean I do walk a couple of WCBS transects, so yeah, got to remember to fit those in and also it’s what time of the year it is, where I’m going to visit. If I’ve got a sort of particular plan in mind, if it’s studded blue season, I will think where haven’t I been or where do I need to go. Trying to go to somewhere different.

**INT So, you’ll think it’s blue season, is it a combination of places you haven’t been to before but also places that kind of nobody has been before or places that are under recorded?**

P01 It’s places that are under recorded. Because some people like [Name] have tried to visit every monad within the county, I don’t know whether you’ve added him to your list.

**INT Yeah, he’s on my list.**

P01 He’s getting on a bit now, but he will – he’s a good – yeah, he sort of has similar motivation, when he was a bit younger he would go and visit all of those – every monad.

**INT But your motivation is more, you don’t personally want to tick off every monad, you want to particularly go to the ones that are under recorded.**

P01 Yes. I don’t want to go to the sort of – the sites that everybody is going to. I might pass through them but that’s on the way to something else. And also, when I’m recording I’m recording every species. Every [species] species. It may be studded blue season but if there’s small coppers and small [unclear 00:15:14] out and everything else, they will get recorded as well.

**INT So, you will say for this site this is my list and then that gets put into the records?**

P01 And I’m always recording, you know, ensuring that I’m pretty methodical on getting the right accuracy for the GPS. So, I’m always looking at the GPS.

**INT And do you get information from anybody else in terms of places to go?**

P01 No.

**INT So, it all comes from you and your –**

P01 The one exception was this year, sorry was last year, I heard reports of [species], which some idiot had released, so I needed to go and check that out. That was with my county recorder hat on.

**INT Okay, but otherwise it comes from just your own personal knowledge of the data, which as county recorder nobody knows better than you I guess. Okay, I’m just looking through my list of questions. So, do you kind of have support from anybody else in terms of recording the or are you kind of very much operating in isolation, do you have a team of people where you can say could you go to that site?**

P01 No, I’m always operating by myself. I’m not that sort of type of person that can automatically drum up teams of people.

**INT And you don’t get information from –**

P01 No, I’d much rather go to places where there’s nobody else. Generally, I don’t like crowds you see.

**INT And so when you’re looking at a square that’s not been recorded do you kind of look at their – the aerial maps and say “This looks like an interesting piece of habitat” or “I can access here, there’s a footpath” what sort of process –**

P01 I will generally just go and look at the ordnance survey maps, work out roughly what I’m going to be doing and then take it from there. So, it’s always nice to be going out and explore, so as long as I’ve got somewhere to park, and it isn’t 20 miles away.

**INT So, it’s as much kind of the exploration and the excitement of potentially seeing – visiting a new area as much as anything else.**

P01 No.

**INT And will you go to the kind of urban areas as well as the –**

P01 No, they’re far too crowded. It’s got to be countryside.

**INT [county] is interesting isn’t it in that it covers all different types of rural to urban gradient.**

P01 Yeah, 200 years ago [county] was extremely rural, and [city] used to be north of the [River], now it’s down to the [motorway].

**INT Yeah. I was having some very interesting conversations with [Name] yesterday about that and his campaigning. So, I guess would you ever be interested in – if somebody came to you and said, “Could you visit this particular place?” is that something that would appeal to you at all or are you very much just interested in kind of – you’ve got your plan for the year of the places that you want to visit?**

P01 No, I’m not that organised. All of these decisions are sort of rather last minute. I am making it up as I go along almost. And if someone sort of says – I have it certainly in the past, you know, someone was leaving a reserve to BC, so I would therefore go and look at what it potentially was.

**INT So, what sort of things might motivate you do you think to like act on a request like that, of somebody asking you to go to a particular place?**

P01 Good question. There’s got to be a reason for doing it. And they’ve got us all – so, you know, if it’s going to be – well any sort of countryside provided it’s not intense agriculture it’s going to have some [Species] in it, one hopes. Until you go there you won’t know what’s there.

**INT And you would be interested in going to a site even if it’s likely to have common species?**

P01 Most of these sites – yes.

**INT But there’s not – if you didn’t have a chance of seeing any rarities you would still –**

P01 I’m not a twitcher.

**INT You’re not a rarity hunter.**

P01 No, you know, yeah, it’s always nice to see – once you’ve seen a rarity, well – do you need to see it again. I mean there are probably rarer species in [county], is Wood White, well yes if you want to – go down to the [unclear 00:21:15] Forest areas and you’ll find them. If you don’t then it’s because they’re out of season. They’re not difficult to find. The hairstreaks are probably more difficult to find because they like to sit on the top of the canopies.

**INT Not very helpful. Sorry, I’m just having to look at my questions. So, how – you mentioned you wouldn’t want to go 20 miles away, is there a limit to kind of how willing –**

P01 No, it’s just 20 miles in terms of walking. It needs – I will drive to the other end of the county.

**INT But it’s the walk from where you can park your car. Okay. And then I guess going back to that question about if people were asking you to record in a particular place, so are there particular organisations that you would be more receptive to having that kind of message from like [species] Conservation, or a recording society, or a wildlife trust?**

P01 Well, you see if – [county] Wildlife Trust have run bioblitzes in the past, obviously not recently but normally I would go along to those because I think well look, they’re running a bioblitz. I ought to go along as county recorder. And if someone wants advice say on Silver Studded Blues, something that I know something about, you know, yes I’ll quite happily go along and help them. So, I’ve done that, I’ve gone along to – the sites in [county], [wildlife charity] and [WILDLIFE CONSERVATION] in [COUNTY] even. So, I’ve gone to those because I went – I went over to [WILDLIFE CONSERVATION] in [COUNTY], I was looking for the ants for a study.

Seeing whether the lasius niger ant was there because I’ve managed to work out how to identify those little so and sos. You have to stick them underneath the microscope.

**INT But then if you found the particular ant species then you know you’re – well more of a chance with it.**

P01 If you know that you’ve got a strong population of the right ant species then you’ve got a good chance that the ant will – sorry – and also the vegetation is the right, you’ve got a good chance, because at that site they were wanting to introduce the species, I was saying “Look, it’s heading in the right direction. It’s not quite there yet but keep doing what you’re doing, a couple more years and it will – two more years and then it will be ready”. Because that’s the important thing, you know, if you get the right habitat the [Species] will survive because basically they’ve been almost lost from that part of the country.

**INT And is that because of scrub encroachment?**

P01 Yeah. This particular site was a new site for [WILDLIFE CONSERVATION], so they were doing a lot of – let’s get it back into proper heathland rather than woodland, rather than being plantation, a woodland plantation.

**INT So, you were advising on the habitat management?**

P01 Yes. I’d managed to work out what Silver Studded Blue habitat management looks like.

**INT But that all comes from recording doesn’t it, and seeing where it is. Like you say it’s a really nice feeling when you can walk into a site and think that’s where it’s going to be and then you go and find it, and yeah, and you’ve got your eye in haven’t you for the particular place where it’s more like to be. So, then the last bit really is about what you do with your records, which obviously as county recorder is probably a bigger part of the picture for you than it is for a lot of people because a lot of people will just be passing their records on to you, won’t they, to kind of process. So, that’s a big part of your role isn’t it in terms of –**

P01 A big part is verification of the records and so – because the records are inherited from my predecessor. That’s needed sorting out, because he was sort of the old school where people were submitting their records by paper. So, he was doing a lot of summarisation of records. So, I then – so what I did was I then went back and got all of the original [WILDLIFE MONITORING SCHEME] transect records for [county] and built those up, and tried to make sure –

And because the ones that I got from [RESEARCH ORGANISATION], I got corrupted. There was some – you could see it was all some importation error had occurred, because you’ve got some silly abundance count or something, and I went back to all of the original records as far as I could to clean them all up, so I’ve now got a clean dataset as far as possible. And then I re-verified all of the records.

**INT So, that’s the [WILDLIFE MONITORING SCHEME] ones?**

P01 The [WILDLIFE MONITORING SCHEME] ones. So, that’s in my dataset. So, I want all my records to be as clean as possible.

**INT And then presumably you’ve passed that back to [RESEARCH ORGANISATION] then in terms of –**

P01 I passed it back via [Name], because he’s the BC contact but I don’t think – [RESEARCH ORGANISATION] don’t re-analyse their records, I think they just sort of keep tacking it on at the end.

**INT So, then in terms of the – not the transect records but the – all the other kind of site lists etc. and just casual records you compile all of those as well?**

P01 So, all of those go into the database.

**INT And you’ve got your database that you hold for [county].**

P01 Yeah, all stuck in [recorder six? 00:29:10] is the master database and I’ve managed to work out the best way to record it. I can now record – so it took me a while to sort all of that out, so what I do with the – what I now do, is I have for each year, for each source of the records, so whether it’s from iRecords [Species], or iRecords app, etc. or big [species] count I set up a new survey within – so I then have about seven or eight surveys per year. So, it makes it very easy. You can see which surveys have occurred. If you’re looking back at a recorder you can see what survey, where they submitted their records. I can always know the source of the records. So, that is incredibly use for me. So, that’s all part of the verification – you can sort of see if someone has only been submitting records for the big [species] count for the last five years, and now submitted a few records to iRecord you can go ah, they’re not very experienced.

So, you know, it’s part of the verification process to understand – how experienced is this person. So, it depends on whether you sort of given the benefit of the doubt, and someone who has 30 years’ experience, not enough evidence to submit.

**INT If it’s – so if somebody who you thought was not experienced but they submitted a record of something fairly common at the right time of year you would let that through?**

P01 I mean, yeah, every record has to have a reason why it gets rejected. So, unlike some county recorders – some county recorders will just say reject, it’s been passed by county records, it contains errors, bump, reject, but I say “Well, look I’ve got to have a reason to reject. I can’t” rejecting a survey out of a whole batch of records, 20,000 records just because I don’t like big [species] count is just a pathetic excuse. I would – so if it’s within – if the distribution is right the flight period is right.

So, I’ve now got all of these on our scripts that I run. So, this does all the [unclear 00:32:02] so I check all the flight periods. So, I’m pedantic over the flight period. So, if I get – so I’m always looking for the outliers.

**INT And is that getting more difficult with kind of climatic changes and things like that, do you kind of always have to keep one updating?**

P01 No, no, because it changes from year to year. So, I’m not – so it doesn’t matter that 20 years ago the flight period was that it’s now that. I’m not worried about what it was 20 years ago, I’m worried about what it was this. Was it the early season or late season, and I determine that from the records. So, if 10 people say they saw a Silver Studded Blue on this date, well that’s when it started. The majority vote wins. Regardless of if it’s very early or very late.

How do I know. The records have got to tell you. What you’re doing is I’m not looking for the records that are the outliers. So, if someone says I saw – if the majority said it started on the 21st and someone said I saw it on the 19th, I’ll probably let it through, because it’s a day or so out. But if it’s a week out they will probably get it rejected unless there’s evidence.

**INT So, you – how many of the records have photographs with them that kind of help you with that verification then?**

P01 Well, none of the transect records do, so that’s about half the records. And it’s probably only about 10%. Because it’s only – the big [species] count is quite a lot of records, none of those have photographs, none of the garden [species] schemes have, so it’s only iRecord and then it’s not all of those, and then you get some people – like I’ve got one couple should I say who does Brown Hairstreak egg surveys and photograph every egg. You know what a Brown Hairstreak egg looks like.

**INT I trust you now.**

P01 Too much effort. They give me 100 photographs to look through but at least they can tell the difference between that and Blue Bordered Carpet.

**INT So, apart from examples like that would more photographs generally be helpful. Like would it be helpful if more people submitted photographs with their records?**

P01 Yes, but it hangs on the quality of the photograph. I can work out a blurred image of a Brimstone from the shape of the wings, but sometimes you get photographs – there’s a [species] in a field. Could it be a bit larger than one pixel large please. Completely out of focus, it could be anything, or it – so I try, you try and be as generous as you can but –

**INT Yeah, there are limits.**

P01 Yeah, so good quality photographs always do help. Especially – I think it’s – it’s not so important for the common species but it is important for the rare species, and if you’re a beginner, because some beginners just can’t tell the difference between a Small Tortoiseshell and a Peacock, it’s that bad.

**INT So, do you ever provide feedback to anybody in terms of –**

P01 Yeah.

**INT That’s a big job then.**

P01 Yeah, I mean every record – I mean an iRecord, every record that gets redetermined or rejected will always have a reason. I will always put in a reason. And that will apply to transect records because they end up in the same place. It’s all part of [RESEARCH ORGANISATION] but if it sings like big [species] count, unless I’m querying the record then no. What’s frustrating is that it’s quite often you can query a record and people don’t respond.

**INT You don’t get anything back, yeah.**

P01 So, it’s what – it goes into the pot of record queried, not accepted.

**INT And then if somebody has submitted just like a list of records to you and you’ve got some queries you would go back to them and say, “Have you got any evidence?”**

P01 Yeah, it depends. In most cases I will go back. If I think I’m going to get a sensible response. I probably won’t if I’m, yeah, if it’s – not always, I think – not always the big [species] count records.

**INT Sometimes do you end up having some quite good interactions with people in terms of –**

P01 Yeah.

**INT You learn something from them, and they learn something from you?**

P01 It’s always – I mean the great thing is if you manage to educate someone, you know, and you think right good, they’ve moved on to the next – I like doing that. How do you tell the difference between the different whites, yes, you can do it from the other side.

**INT And then do you see a change in recording behaviour of people when you have had that interaction with them, do you feel like it encourages them to do more?**

P01 Yes, some people – if you provide positive feedback and, yeah, I’ve had some good comments come back. So, it’s helped them.

**INT And then once you’ve got your kind of final database of records for the year do you have to then formally pass that on to BC?**

P01 Yes.

**INT And then do you ever get any feedback back from them?**

P01 Occasionally there’s a query on a record and then I have to go back – then fortunately because – if you see if I’ve got a sort of an odd record that I’ve accepted I will then put a comment in that on my database. So, I can always go back and find out why – was that something that slipped through, you know, horrors of horrors, not that I would do that. I can’t the standard fall down. What do you mean it’s not perfect. So, the records have got to be –

**INT So, it’s that double check again, there’s your checks and then there’s their checks.**

P01 Verification checks, very few comments come back. And all county recorders are meant to supply their records by the 31st of March. So, I have always got my records well in before then. But some I know were –

**INT Last minute.**

P01 Well, some are still waiting to submit last year’s, you know, 2019 records.

**INT It’s a big job though isn’t it. It’s time consuming.**

P01 The biggest job I find is probably importing of the records, and cleaning them up. I’ve now managed to automate a lot of the things, so – because I will run MMR scripts, so I will check the flight periods. I’ve got plots of all of the records so I can go through and check all of – so it’s all date versus abundance, so you can see there’s a nice little peak there, so you can just scan through all of those little pictures, they all look sensible. Oh no, something a bit wrong there, go back and check it.

And then, you know, and I use Q Disc so I can look at all of these things on the map. So, one of the things that I did – because I have automated and BC were a bit disorganised, so I said they needed to be a little bit more automated and so I set up post [unclear 00:42:12] SQL database for them, and then got them using Q Disc. So, they then managed to do some more decent analysis. Because we’ve got [unclear 00:42:29] in the sort of [city] area and then it’s expanding out, and of course Forestry Commission's advice was spray everything.

Spray a whole oak tree, we don’t care how many blue tits we murder, starvation, blah, blah. So, what they did was – because I’ve managed to set them all up to do all of that they could then do all of the analysis and say – which previously they’ve never been able to do. So, you could sort of say “Look, these are where we know there’s priority moths living”.

**INT I’m sure they’re very grateful for your – the skills that you’ve provided to them.**

P01 Well, it’s because, you know, I spent my whole career in IT, as an IT architect. So, you know, this – I set it up for myself. It all stemmed from the atlas. I’d done all the maps on there, and I’d done it all sort of very [unclear 00:43:47] and then from that I then just automated things.

**INT So, how often do you do an atlas, is there another one due or are you – no.**

P01 No. I mean the previous one was in 95 which was sort of the first atlas of [county], and it was in the [county] Wildlife Trust, so I’m sure [county] Wildlife Trust don’t want another atlas at this stage. They are busy selling off the rest of the atlases that they have. It wants to be sort of – there needs to be 20 years or so.

**INT But do you any sort of annual reporting or anything like that?**

P01 I did do an annual report for the county, but I’ve sort of fall out with the branch. So, I don’t do the annual report, they do it themselves now.

**INT The politics there.**

P01 It just got – I’m retired. I’m out of politics. I can’t be bothered with the infighting.

**INT So, what – in terms of then using that data what sort of things do you kind of would you hope the data is used for?**

P01 Well, as I said last year I had this paper published on abundance trends which was doing – because what I wanted to do was to have abundance trends for [county], and some people sort of said “Oh well, you know, [RESEARCH ORGANISATION] used to be able to publish site indexes and we would use all of those, and then they stopped publishing them”. And the reason was, was that there was a trouble with them. And the reason is – well, when you get into the statistics of things you understand why.

The reason is, is that occasionally the model blows up. You get a silly result. Usually due to lack of data, there’s insufficient data to affect the curves to the data. And of course, they’re running their models on doing it at the national level so I wanted something that would work for [county]. And I think I’d asked [RESEARCH ORGANISATION] “Could I have the code for use” instead of reinventing it, and so of course [Name] sort of say “Oh yes, you can have it” and then when you ask [Name] “No”, so I ended up writing my own.

And of course, I then had my own ideas, and I then developed those, and I wanted to get it so that they work – so that the site index was accurate, so I played around with it and got it working well. So, it would work well, the Wood White on one site, that’s working well, that’s good. And that ended up with that paper being published last year.

**INT And so then is that with the view of kind of being used by conservation organisations –**

P01 It then highlighted the red list species. It identified the two species, Silver Studded Blue and Grayling were threatened with extinction in [county], just from the abundance trends, so I then went and told [county] Wildlife Trust and suggested that their management of heathlands were crap, and would they like to do something about it.

**INT Here is the evidence.**

P01 Yes, it’s all your fault. And fortunately, the person who is in – who’s now in charge of that had tried to introduce the Silver Studded Blue at one small site in [county] and it failed, and so he was quite receptive to the [unclear 00:48:23] “Oh yes, we could improve the management a little bit”.

**INT And then are you planning on updating those trends each year then?**

P01 Yes, because I read.

**INT You’ve got it now.**

P01 You run the script. Yeah, it takes four or five hours to run on the laptop, so it just – gives the laptop something – why does a laptop have all of these 16 cores or something, I now give it something to do.

**INT Very good. And then do you ever feedback that kind of information about what the data is being used for, back to the people that originally collected it to kind of complete that loop?**

P01 Well, I mean that – you would – when I was doing the annual reports that information was going back. I’ve let them have – I’ve let the branch have the abundance trends for the last year or so, so they’ve got the latest abundance trends.

**INT Is there anything – because I guess ultimately the data goes to BC doesn’t it and they can do what they want with it, so is there anything that you wouldn’t want the data to be used for?**

P01 My biggest concern with the data is privacy. Because sometimes you’ve got people’s garden records so it’s respecting that privacy. So, it’s not going and printing details and maps showing people’s gardens. So, that’s my biggest concern. Is just respecting people’s privacy. If you’re doing it in some nature reserve where there’s public access then great, show them a 10 figure grid reference. But if you’re doing it generally, no. We shouldn’t be publishing detailed maps.

And of course, if you’ve got – not last – a few years ago, it was 2018 [city] University, I forget who it was now, they were doing a nine yearly survey of Silver Spotted Skippers in the country. So, that was – so that was a nice bit of interaction, so I sort of let them have my records and they let me have some copies of the papers. So, yeah, it’s always great to read the papers.

**INT Yes. My PhD supervisor was [Name] and – so when I started my PhD he was absent for about the first month or so because he was – that was 2008 I think it would.**

P01 He was doing some recording.

**INT I’m sure it was that Silver Spotted Skipper survey. Yes. [Name], who – I think she wrote a paper anyway on kind of microclimatic – it was even like where on the grass, the Silver Spotted Skipper lay their eggs in terms of the microclimate I think, that was very much what my PhD was based on as well.**

P01 Yes, it’s temperature dependent isn’t it. [Name] did the modelling and that was really interesting, we could work out where they should be.

**INT Where they should be, yeah.**

P01 Guess what, they’re roughly where they should be.

**INT Always nice to know.**

P01 So, it’s – yeah, if people end up writing scientific papers about this that’s fantastic. And it’s also, yeah, and it was also good when – I mean I actually told [Name] that his article about the Silver Studded Blue, was that it was a sedentary species was wrong, and here was the evidence. And it was not through introductions, it was through natural flight. And then looking into it in more detail and you find that, oh yes, look someone down in Spain had done some MRR releases and they actually proved it.

So, yeah, and it’s – what I find interesting is actually understanding the habitat requirements, and my theory is that with all of these species that are early successional species or are relying on a femoral habitat, they’ve got to be mobile. Because if they’re not, they’re doomed. And what someone told me, they said, “What can happen” if the habitat within their area is localised, you know, it’s confined and there’s no other habitat for them to expand into they can end up being quite sedentary because there’s no – if your sedentary that’s the only bit of habitat you’ve got.

So, they won’t go out and explore, and whereas naturally, you know, because that’s what it pays them to do, over several generations they’ve got to be sedentary whereas naturally they would be a lot more mobile because evolutionary it would tell them this habitat is going to be lost in a couple of years’ time, you better go and find some new habitat.

**INT Yeah, and then if some individuals succeed in finding new habitat then that favours those more dispersive individuals doesn’t it, and that’s retained in the genetic pool. Yes.**

P01 And that’s where I think it comes from.

**INT Yes, very interesting. It takes me back to my previous life of studying these things. So, I guess the other thing along that line is in terms of use of data, so this project thinking about trying to do more along the lines of species distribution modelling, so rather than having points where species have been recorded on a map it’s trying to produce distributions that are modelled based on where species have been observed and then various environmental factors.**

**So, is using that data in that sort of – your data in that sort of modelling, is that something that you are kind of receptive to or do you have concerns about that?**

P01 Yeah, because – you see, when I’m out there verifying records. I’ve also got to decide, if someone gives me a record where they are seeing that species, is that acceptable or not. Look, if it’s Brimstone that can occur anywhere. But if it’s Silver Spotted Skipper, it is confined to a particular habitat so even though this may be a new dot in the square, is this possible. And I’ve got to decide that. And I’ve got – and that’s part of my analysis, so what I do is I – when I plot out the distribution maps I query – I’ve got a query that I run, and that will automatically identify those monads that I need to go and check.

I need to look at in a little bit more detail. Now, if it happens to be the monad next door, no brainer, almost whereas – but it very quickly enables me to identify those records I need to look at. And for some, you know, if it’s Silver Studded Blue well that’s heathland, look at the priority habitat for heathland. That’s going to give you a really good thing and then look at the bedrock. Then that’s going to give you a really good idea of where that species could be.

And also, you know, yeah, it may well be sitting on sandstone but if it’s agriculture, unlikely. So, you know, I’m always looking at these things. This is what I do when qualifying records. Is looking closely at all of these things.

**INT Very interesting, yeah. It’s 4 o’clock, I’ve already taken up an hour of your time, so last couple of questions, well, is there anything else that you wanted to say about recording or why you record, or how you go about recording that you haven’t said already?**

P01 No.

**INT So, as you know we’re developing this tool and there’s lots more stages to the project in terms of getting people to test it and things like that, so is that something that you would be interested in hearing more about as the project develops?**

P01 Yeah, and as and when you get around to publishing any papers on the subject can you let me have a copy, if it’s open access you can just send me a link. If it’s one of the restricted ones that you have to pay the publisher £5m per copy –

**INT We have to publish open access now, so it will be open access.**

P01 And then just send me the DOI.

**INT Okay definitely will do. Thank you so much for your time, that was really, really interesting. Really good to talk to you.**

**[IRRELEVANT CONTENT]**

**Audio ends: [01:02:55]**