

Career Interview with Dr Elizabeth Masden, Research Fellow, Environmental Research Institute-UHI

Interviewed by Lois Calder, Dean of MASTS & SUPER Graduate School

Good morning, Liz! To start off, please tell us a little bit about your background and how you got to where you are right now.

Well, I suppose, in one sense, it was a little bit of a meander but I come from a marine biology background, did a marine biology undergraduate, and then went on to do a master's in Environmental Management. During my undergraduate, I spent my third year at the University of California, Santa Cruz, through an exchange programme, which was a great experience, and I got some extra kind of exposure to different environments, different topics, different people working on different things. But from my master's I did a project based around fisheries and modelling fish movements, which got me interested in the modelling side of ecology.

Working there gave me a bit of insight. I worked at CEFAS and it made me realise that you don't always have to just work on a single species, be focused on single species, but that you can have experience of modelling that applies to a range of different situations. That led me on to my PhD, which was looking at cumulative impacts of wind farms on birds. This was all based on modelling and set me up for, I guess, where I am now. So, I haven't wandered too far from that.

Straight out of my PhD, I worked a little bit in a consultancy while I was waiting for my viva and then for a couple of months whilst doing that, I was applying for postdocs.

I got a postdoc at the Environmental Research Institute and I've been here ever since in Thurso.

What does a typical day in your current job look like?

Hmm. A typical day? I'm not sure there is a typical day!

It involves talking to students, helping PhD students with challenges that have come up in projects. It involves talking to collaborators about projects that I'm involved in. It involves talking to all sorts of people and thinking about new projects, funding applications.

That also involves talking to renewable energy developers. It involves cups of coffee with colleagues and thinking about new projects, interesting ideas over a cup of coffee which I think is incredibly important. It keeps the relationships going within organisations, the coffee break! It's a good place for new ideas to come, I think.

What else does my day involve? Trying to write papers, trying to carve time to do analysis of data that I've collected myself. It's a bit of a juggle, especially as I work part-time!

What sort of skills and experience do you think have really served you, to help you get the job you do now and to deliver it well?

I think having done a PhD in a setting where I was in a lab group that was based around methods rather than species or specific taxonomic groups for example, really set me up well for thinking broadly around questions or approaching things differently and not always getting stuck in the way that's traditionally followed perhaps.

It allowed me to have really broad conversations during my PhD and that stuck, I think. The idea that you can go look broadly at how to solve problems has really helped me, I think. Also, the other thing that's really helped is just having a tradition, again from during my PhD, of building relationships with people to make a cohesive group, to see people I think has served me very well.

Thinking about your current role just now then, working on birds and renewable energy, what are the greatest challenges you're facing right now?

I think some of the greatest challenges are the rate of deployment of developments or the rate of expansion, the fact that there's a trade-off or there needs to be at least acknowledgement that there's a climate crisis and a biodiversity crisis, and renewable energy needs to consider the two. The fact that often we're limited by data and trying to find ways to provide reliable information often without huge amounts of data or in short time frames.

Thinking about postgraduate students moving into an area like this, where do you think skills gaps for the future might lie?

I think particularly multiple stresses in the environment and how to couple that with spatial planning. What do we want these spaces to look like? What do we want the ocean to look like, including anthropogenic activities, but also what do we want the environment to look like? Because, ultimately, they're all judgments, aren't they? Value judgments. Who's ever values they are, there still needs to be some value judgment, no matter what the scientific method is to get to an impact.

So, I'm thinking it's about multiple stressors and how to take that and say, well, this is what we want our landscape to look like, this is what we need and how do we balance it?

What do you love most about your job?

Well, I guess there are two. I think one of the things I love most about my job is the chance to get out and do fieldwork when I can, to be reminded why I am doing what I'm doing, getting into nature, sitting there and observing and realising actually this is what's driven it all. But also working with people, working with people with diverse skill sets, things that I am not able to do, bringing people together. I guess it comes back again, doesn't it, to those good relationships and making the best use of people's skills to get somewhere. I really enjoy that.

Thinking about specifics, but also more generally about the transition period of moving from a PhD into employment, if somebody wanted to move into renewables and ornithology, or work at the Environmental Research Institute in Thurso, what sort of advice would you give?

I think I would say that we all have lots of skills and sometimes we undervalue our ability because it might not be exactly what we've been asked to do but actually hidden behind it we have lots of ways of meeting those challenges. We just might all be focusing on the specifics too much. So, I suppose in one sense it's give yourself a break.

You actually know quite a lot and are able to do lots of things even if the specifics might not immediately make it seem like you are. Yes, valuing all of your skills.

Let's talk about your transition. If you think back to that time when you moved from postgraduate research, finding your first job, a job that you really wanted. What happened round about then and how did you feel? How did you deal with the challenges that were thrown up?

I found it difficult because there were a lot of challenges. My postdoc, I suppose, wasn't in one sense a typical postdoc.

I had a lot of freedom to develop what I wanted to do and that wasn't what I had expected. So, I didn't have a set project to work on that I was doing a very specific piece of work on where the bounds were tight. I had something laid out in front of me that was here's an area, develop a project.

That was actually quite difficult to just believe that I knew enough to say, oh, actually, this is important. This is where I'm going because I hadn't expected to be given that freedom. And that comes back to the idea of trust what you know.

You do know it. You just have to believe that, and take advice when you need it.

Also, I had the opportunity to become a PhD supervisor myself quite early on. And again, for that reason, that was quite difficult because imposter syndrome sets in quite quickly. Do I have enough to give to this person? Do I know enough to give to this person? But you do. It just might not be the traditional route of things sometimes.

It's interesting that you mentioned imposter syndrome, and I'm wondering about the support that you sought out and who helped you to deal with difficult times, where we do doubt ourselves. What sort of support did you seek out?

Actually, I went back to the networks that I developed during my PhD and actually went back to my PhD supervisors and asked their advice and just said, you know, in this situation, this is how I'm feeling, or this is what I'm doing. These are the ideas that I'm developing. Am I way off or not? Can I just get your advice on this? And that was really helpful because they're relationships that you've developed already. And these people know you. I found that really helpful.

I think it's important that we are looking for support networks. So, thinking then ahead, what do you see for your future?

I think what I would like for mine is I have a small team around me here at ERI. And just to further develop that, I think, to try and build that, build that group so that we have more resource to be able to do more interesting projects.

Often, we're limited by capacity, by just how many things can you do without stretching everybody too far. And so, building the kind of people resource together, a slightly larger coherent group to be able to address some of these bigger issues that I've already talked about that the renewable energy industry will be facing. I think that's what I'd like to see happening in the next few years.

Well, expanding a little bit on that question... what gives you a sense of meaning and purpose in your career? What fulfils you?

I think feeling like I'm addressing an issue, an applied issue, that's a real problem out there to somebody or something to the benefit of the environment. If I can see that even if it's a tiny step, moving towards something. Or if it's a little kick for a conversation to try and twist it around, to get some movement in something that's stagnated. That gives me fulfilment.

I don't always need to see a solution. I just need to see progress. And if what I can do can push something towards bettering the environment, then that's good. I'm happy.

Our time is nearly up, and I just I want to say a huge thank you, Liz. Are you happy for people to reach out to you via LinkedIn, or perhaps on email, to ask advice about this area or working in the north of Scotland at ERI. Would that be okay?

Absolutely. More than welcome.

Okay, great! It's been an absolute pleasure to speak to you.

Take good care. Thank you.