

Ten minutes with Colin Tosh

Would you like to get to know the ORC staff, learn more about what they are working on at the moment and find out what inspired them to pursue a career in organic research?

To help celebrate our 40th anniversary year and throughout 2021 we will be releasing short 'ten minutes with' interviews to let you do just that!

The first is with Colin Tosh, ORC's Senior Agroforestry Researcher and can be read below.

What is your job role at the ORC?

[Senior Agroforestry Researcher](#)

How long have you worked at the ORC?

I started at the beginning of 2021

Where are you from/ where are you based?

I grew up along the Strathmore Valley in NE Scotland, son of farmworker working numerous farms in the area. The Strathmore Valley is one of the main agricultural areas in Scotland. It is mainly arable and was a European centre for soft fruit production when I was a kid and I used to pick berries during the summer school holiday. The berry industry fell away a bit but seems to be making a comeback with the use of polytunnels. I now live in NE England.



What is your background and how did you get involved in the organic industry?

I can't honestly say that I have always been as interested in agriculture as I am now. My dad encouraged me to take an interest in farming, but then at high school, to my surprise, I found myself top of the class in the science subjects. I was academically gifted! It was that time, the 1980s, when 'upwards mobility' was everywhere in the media, so I upped sticks and went to study Zoology at the University of St Andrews, then a DPhil on insect-plant interactions at the University of York.

I then followed a pretty conventional academic career path culminating in tenure as a lecturer in Ecology and Evolution in a good English university a few years back. But my dissatisfaction with academia had been growing. The UK universities have become incredibly large, corporatised, and hierarchical and eventually I just thought enough is enough. I have also become increasingly concerned by the global climate and biodiversity crisis so I looked around for jobs that would allow me to use my research skills and become involved in addressing this crisis. I was keen to work for smaller non-profit organisation with some kind of environmental advocacy role and was delighted when ORC offered me the job.

What does your job role entail?

It is extremely varied, and I like that. My core role is to do research on [agroforestry](#) (benefits of trees on farmland) and apply for funding for research on this topic, but I do a lot of other things. I participate in a lot of meetings with people in other non-profit organisations, (often quite important and influential people) to discuss projects and funding opportunities. I will start getting out into the field soon to sample wildlife on farms as part of research projects. I also get asked to do quite a bit of this kind of stuff I'm doing now, creative writing almost – which is fun to do!



What are you working on at the moment?

The two main projects I am involved with at the moment are called the [Agroforestry ELM Test](#) and [AGROMIX](#).

The first is funded by Defra and uses workshops and surveys of farmers to find out how they would like to be paid for agroforestry projects and receive advice on tree planting within the government's new scheme (ELM) for the delivery of public goods. This may sound fairly mundane but it is an important project. It is highly likely that in 20 years' time the view you get as you drive down the A1 will be quite different – instead of the fairly barren looking agricultural landscape you see now, there is a good chance the agricultural land will be much more verdant, with trees and hedges lining fields as far as the eye can see. The Agroforestry ELM Test project we are working on is key to making that happen, so it is an important and exciting project to work on. You can keep up to date with developments on this project via our [Agroforestry ELM Test blog](#).

AGROMIX is also a very important project. It is an EU-funded project based round the idea of agroforestry increasing agricultural *resilience*. All farmers have noticed a serious increase in year to year and within year weather variability (droughts, floods) and this is beginning to impact yield and other important agricultural outputs. This is only going to get worse. It may sound dramatic, but the inability of agricultural output to remain steady in the face of increased environmental variation is a civilisation-threatening issue. It really is. The idea is that trees, by almost snuggling fields in a blanket, can maintain a favourable microclimate and so decrease the impact of weather change on crop output. It is a very important project!

Some of the equipment being used in this project is pretty amazing too. It used to be that to do a bat or bird survey you would get someone from a local society to come along with their net and recording equipment but in this project it is all automated! We use a circuit board about the size of a credit card that gets tied to a tree and records the sounds the animals make. After a couple weeks this gets taken down and sent to Germany for analysis by computer and identification of the birds and bat species present. Pretty amazing.

What do you enjoy about working at the ORC?

I like the fact that it is a small organisation (25 employees). I think some people get used to working in large organisations but I don't think it is a natural way to organise human endeavour. In a small organisation you get to personally know everyone, from people in my role, to the CEO. That's the way work should be in my view.

The people working in ORC are also exceptionally friendly. Every single one has been friendly and welcoming. Because it is a small organisation, there is also more variety in the job you do. You often have to help out people in quite different roles and this is fun and interesting. Here, for example, I am a researcher helping out the communications team with this piece of writing and it is a nice change from my conventional research role. There is no sense in ORC that you are shoehorned into a very specialist role for the sake of overall organisational efficiency. This makes work more rewarding for employees.

What do you think the ORC's biggest achievement over the last 40 years has been?

Probably becoming a national leader in agroforestry, but ORC works very closely with all the other players in organic farming and it is more appropriate to look at the achievements of this sector as a whole. Over the last 40 or so years as 'chemical farming' has swamped agriculture and badly damaged the natural environment, organic agriculture has swum against this tide to generate a major food sector and brand that is still growing at a huge rate. None of this has been incentivised by government. It has all been done by activists and non-profit organisations working in this sector; just through sheer belief and determination. This is a great achievement.

What do you see as the future of farming and what role does the ORC play in this?

I would like to imagine a nation of farmers educated in the way plants, animals, and microbes interact with each other and the environment that surrounds them and using this knowledge to inform their farming practice. Mainstream farming is a long way from this ideal at the moment, however, and in my opinion ever since I was a kid mainstream farming in the UK has been moving in the wrong direction. Let us see how things play out post-Brexit. ORC has and will continue to effectively promote alternative, nature-based farming practices through its extensive research, communications, and knowledge exchange activities.

Is there anything exciting we should keep our eyes out for over the next couple of months?

There's a bunch of open days coming up at some beautiful East Anglian agroforestry farms coming up in the next few months. Farmers in that part of the country interested in incorporating trees into their crop and livestock production should go along, you can find out more information [here](#). One major goal for me in the next few months is to write a scientific paper on how the latest cutting-edge research insights from plant ecology can inform the design of forestry and agroforestry systems.