

The Apple Club NEWSLETTER

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Chair his interview, where he was examined on his research by experts from the Netherlands and Ireland.

To say I learned a lot in those three hours is an understatement.

What was most interesting was how the soil he took from me, though very low in what would normally be termed “available nutrient”, had developed a microbiology including viruses, fungi, bacteria, nematodes and larger organisms, that allowed plants to thrive even though conventional understandings would not make it seem likely. Israel was able to detect many genes in the soil (by thorough genetic fingerprinting for example) that are known to be involved in this work, and to link them to specific organisms. He also measured numbers of these organisms using various scientific techniques from counting under a microscope, to culturing them in the lab, and so on. The movement of nutrients was tracked by radioactive isotopes, and plant and root growth measured during and at the end of the experiments. The sheer volume of work done was staggering, and I had the benefit of seeing the results from soil sourced on my farm.

Israel’s PhD was accepted, and he will be graduating soon. Though he is from Nigeria, he plans to stay in Ireland for the present, to finish off some work related to his thesis, and to publish in some international journals.

The link between what I was looking at when visiting Coleman’s farm (admiring a thriving living soil, and wondering at how well it was performing) and Israel’s work – the explanation as to how that works; the complexity involved and the admission that there is still much to do to understand it fully, is something I am grateful to have had exposure to in the past few months.

I am very hopeful that Israel will stay in Ireland well into the future. He is already a well-known international expert in this topic of great importance to not just farms but also farmers,

food and the environment, and to lose somebody with his level of knowledge would be a significant loss to Ireland.

Tipperary Food Producers Network

As a member of Tipperary Food Producers Network we get to participate in programmes we devise each year. One interesting project we have been working on is entitled the “Tipperary Breakfast Champions”.

According to Fáilte Ireland, the majority of tourists coming to Ireland expect to encounter genuine high-quality locally produced foods in the meals they consume, and encountering these foods leads to holidays that exceed expectations, in turn generating personal referrals and repeat business.

In order to assist breakfast providers in Tipperary the Network will be engaging in promoting locations that incorporate the produce of five network members in their breakfast offerings.

There will be online and traditional promotions, and we envisage a situation where the food producer and breakfast provider support each-other in a mutually beneficial relationship. To participate see www.tipperaryfoodproducers.ie

Loss of a friend

We lost a great friend of the farm during the summer of 2018. Siobhan Martin (Siobhan Kehir from Cahir as her husband Mark says) began working here as a young student in summer 2001, picking fruits and looking after customers. Many of you will remember Siobhan because of her wonderful personality, charming nature, and because she brought out the best in people. She worked at the farm until 2013, and was a regular caller here ever since, though her career as a teacher brought her to Dublin and Templemore. Siobhan died after a relatively short illness which she endured with great character. She is sadly missed by all of us. May she rest in peace.

Welcome to our winter newsletter. What a summer we had (no need to remind the farmers I am sure), after that icy spring. But it was a good one for apples, and the trees, now that they are dormant, look very pleased with themselves. So as usual, it is time to say Happy Christmas to all our customers and friends, and many thanks for your support this year and through the years. We look forward to seeing you in 2019.

David Attenborough

I have always had a great interest in nature. One of the key triggers of that interest was my first teacher in junior infants at primary school, Sr. Bríd, who brought us on nature walks, which I always loved. After that, the Life on Earth series by David Attenborough, which first broadcast in 1979, increased my sense of wonder and made me want to learn more. At that stage I was 11 years old, but I can still remember parts of the series, especially the segment featuring the mountain gorillas in Rwanda.

In the past few weeks, David Attenborough, who was always cautious about making alarming statements, has issued a very stark warning that we surely should not ignore. The essence of the warning is two-pronged:

Firstly, the climate models that scientists have thus far used have under-estimated how quickly the World is warming.

Secondly, only immediate action to reduce greenhouse gas emissions can avert outcomes which are likely to be as severe as the complete breakdown of civilisation, with extinction of a huge

proportion of the species that we share the planet with.

As you would know from reading this newsletter for the best part of 20 years, I have regularly written about climate change, and events such as droughts or storms that scientists believed were made more likely, and more severe, by climate change.

While it would have been more effective if society had taken heed of scientists thirty years ago when they were initially raising their warnings, David Attenborough still believes that there is a chance to avoid the worst excesses of climate change.

It is not easy though. Years of grappling with lowering my own climatic footprint; the emissions associated with the way I live, have taught me that for most people, making personal change, though helpful, is not likely to be enough by itself. This is because there are many barriers in place in society that prevent individual citizens from reducing their ecological footprint.

For example, if an ordinary citizen decides to put solar electrical panels (PV) on their roof, they are constrained by planning law to an area too small to make a significant change to their emissions.

Similarly, parents in towns may be inclined to let their children cycle to school rather than be driven, but are fearful because the traffic is dangerous. Provision of properly segregated and well-maintained cycle paths is a responsibility the government has failed in,

despite the clear advantages from a climatic, human health, and economic standpoint.

The list goes on and on, and in my opinion, the way Ireland has been planned and developed in the past 30 years is structurally quite unsuited to citizens who wish to live with a small environmental impact. This is an indictment of the people in power in Ireland, including the political class. It also needs to change as a matter of urgency, not just because of the climate, but because of the immense fines, we the citizens, will be paying in the very near future, for the country missing its emissions targets.

I would urge you, the reader, to engage with the politicians and people in power in Ireland, to let them know this is an issue that concerns you greatly. If we don't, then we should not be surprised when action is not forthcoming.

Grá apples

This year we had a really lovely crop of apples, and as we thought we would have more than we need for our regular farm-shop customers, we approached a company who supplies Dunnes Stores with a range of exclusively Irish fruit and vegetables, sold under the name Grá, which is the Irish word for love.

After some discussions, an agreement was made to give it a go, and we made an extra effort to grow even more apples to the specification they were looking for, including maximising the red colour, which always helps sell apples in a context where people can't taste before they buy.

The main variety used for the 1kg apple packs (paper sacks as Grá call them) is Elstar, which is always one of our most popular.

So far the sales have been excellent, as has been the public response. It leads me to believe that there is opportunity to plant more orchards, and to reduce the huge annual importation of apples into Ireland.

If you are not able to call to our farm for your supply of apples, perhaps pop into a Dunnes Stores near you, and pick up a pack (or two) of our apples. Our name is on the pack, so you can't mistake them for anyone else's.

In the farm shop (and online):

We have updated the website recently, especially the online shop section, to give people more options on what they might like to order. All the juices, sparkling juices in every flavour, the ever-so-special festive mulled juice made for serving warm, just at this time of year, as well as the lemonades, cider vinegar and jams are available there to buy. And if you mention that you've been reading this newsletter, we'll deliver you a free box of apples along with a case order of 12 bottles of juice. The final date for online orders to get to you for Christmas is December 16th.

At the farm, we have apples of course, Bramley's for cooking and Karmijn, Red Elstar and Jonagored for eating.

Also at our shop we also have hampers of fruit, juices and everything else that we sell, which every Christmas just seem to get more popular. You can take one of the pre-made ones, or get one made to order at any price from about 12 to 50 euros.

A trip to New Zealand

Farmers in Ireland often look to New Zealand for innovative ideas that can be applied here too. The big dairy industry there, as well as plenty of sheep, and a climate which is not unlike ours (at least in their Southern Island) mean that sometimes ideas from there translate well here, and the other way around also.

New Zealand, as well as growing agricultural produce, also has a big horticultural industry, famous for wines like Sauvignon Blanc, as well as kiwifruit, and apples too. When I heard that the International Fruit Tree Association were planning a

10-day educational tour there for February 2018, I knew I had to take the opportunity.

When you get 100 apple growers together on two buses, a lot of conversations begin, and when you make four or five orchard stops per day, beginning as early as 7.30am, a lot is learned. (It would need to be, to justify a trip half-way around the planet).

Among the immediate innovations I brought back and began using were deployment of reflective ground cover mulches, which increase the amount of light that gets to fruit on the lower part of the tree, increasing productivity, and improving quality. The new planting systems were also a step-forward in productivity, with anticipated yields double what were being achieved 30 years ago, and all in a much more environmentally conscious way. As well as leaving room for wildlife in the orchards, yields of over 100 tonnes per hectare mean less area is needed for orchards, allowing more space for wildlife and nature.

As well as all the learning, I made many new friendships in New Zealand, with people from there, and across many other countries also, as they participated in the trip too. In particular I have to mention Andy and Sandy McGrath, who have major interests in apple growing and fruit tree nurseries in New Zealand, and trace their roots back to Waterford. I hope they make it here someday on a return trip.

Conservation tillage and chairing a PhD viva.

Each year, as part of my work at University of Limerick, a field trip to farmers doing innovative work is part of the agenda.

This year we visited the farm of Billy Coleman (former well-known rally driver), which he runs with his family near Kanturk in Co. Cork.

Coleman's farm is mostly tillage crops, with a little stock to assist with the rotations and soil fertility. It differs from many other tillage farms in that a

number of years ago the plough was parked to one side, and it is now rarely used.

Such systems were originally described as minimum tillage, because instead of ploughing, the land was tilled (lightly harrowed instead of ploughed) after one crop, to prepare the ground for the next. As time and expertise have advanced, now it is also possible to drill crops directly into the harvested field, without any tilling of the soil at all, and this is the basis of conservation tillage

It is so-called because it conserves soil organic matter (which is naturally broken down if the land is tilled), organic matter in turn conserves soils structure which reduces compaction and improves drainage. These in turn conserve the microscopic and macroscopic organisms living in the soil, which then conserve nutrients (because they are part of a living soil rather than just present in the soil as fertilizer particles).

Having spent a morning at the Coleman farm, digging holes and admiring the beautiful soil, looking at the cover crops that protect the ground in winter, counting worm-holes, and looking at equipment for this type of farming, I must say this is one of the most exciting innovations I have seen in farming in my lifetime. I look forward to return visits there, and to other farms doing similar work.

And so what does this have to do with a PhD viva (interview) I hear you ask. Well, when somebody completes a PhD (the work that earns them the title of Dr.), it needs to be examined by a subject matter expert, and one of our recent PhD students (now Dr. Israel Ikoyi) in the Department of Biological Sciences was completing his work on the availability of sulphur and phosphorus in nutrient deficient soils, soils which by happy coincidence he took from my farm for his three year study. So I had the honour not just to read his thesis, but to