**Next Generation Podcast Transcript**

Hi, I'm Will Evans and welcome to Ahead Of The Field from NFU Mutual, where we aim to bring you farming stories from around the country, updates on what's happening in the industry, and relevant help and advice. Today, we're going to be talking to some young people from the next generation of agriculture. They are Ed Chaplin, Ben Chilman, Chloe Dunn, and Craig Simpson. We'll find out a bit about their backgrounds, and discuss the challenges and opportunities in farming from their perspective. And we're also joined by NFU Mutual spokesperson, Charlie Yorke. Welcome to the show, everyone.

Will: Ben, let's turn to you first. Tell us a bit about your background and where you studied.

Ben: Yeah. Morning, Will. So I've studied at Harper Adams University. In my third year, still an undergraduate, agriculture with farm business management. Growing up, lucky enough to have grown up on a family farm in North Herefordshire, right on the border with Wales, completely mixed family farm, beef, sheep, free- range eggs, and arable.

Will: Okay. And what about you, Ed? Let's hear a bit about your background.

Ed: Yeah, so I don't come from a traditional farming family in the UK. And while this is often maybe a considerable barrier to entry into the agriculture industry, I've worked on a variety of farms in the UK to try and broaden my experience and knowledge of agriculture, ranging from 500-acre mixed family farms up to the likes of Beeswax Dyson, who are at the forefront of innovation and high- tech farming. And then following that, I began a four-year course in international agriculture science at the University of Nottingham, which I'm currently in my third year of.

So I completed my first year of that at Nottingham and then secured the opportunity to actually study my second year in Australia at the University of Sydney. So I completed that, and then while studying there in Sydney, I managed to secure a one-year industry placement with the University of Sydney Institute of Agriculture, and I'm currently halfway through this placement, carrying out research in wheat heat stress tolerance in a town called Narrabri in North-western New South Wales. And then after completing the placement year next June, I've got one more year of undergraduate study to complete before I graduate from my course.

Will: That is so cool. What an incredible opportunity that is. Chloe, let's hear from you.

Chloe: So I've worked on farms since I was at school and I was involved with my local Young Farmers club, and then took a gap year working on lots of different farms. I then studied my undergrad in ag and business management at the University of Nottingham with a placement year at NFU in the food chain team, and I graduated from there about a year ago.

Will: Okay. And you, Craig?

Craig: So I was fortunate to come from family farms, worked them. I then went to study my undergrad in agriculture at (SRUC) in Aberdeen. And then following on from my undergrad, I was fortunate to win the NFU Mutual Centenary Award, which facilitated me to study an M. Sc in agricultural professional practice, a masters degree which I studied alongside work and did part- time whilst, and full- time employment.

Will: Okay. So let's find out a bit about what you're up to now. Craig, perhaps you could tell us.

Craig: So now I work for Bayer CropScience. During my M. Sc, Bayer CropScience took me on as an employee, and I moved down to Cambridge for 18 months to help out with their sales team. I have now moved back up to Scotland to my home territory, and I'm now the commercial technical manager for Bayer in Southern Scotland. So it's all worked out quite well, to be honest.

Will: Fantastic. And what about you, Chloe?

Chloe: So since graduating, I've been working in agri marketing and I just started a new role last week with Breedr, which is a precision livestock network. Until recently, I also had a small holding where I had free range hens and pigs, and sold that to local customers, and I'm also now at the start of my second year, studying a PhD at Nottingham, which is investigating how the economic contribution and visibility of women can be supported to enhance the sustainability of UK agriculture.

Will: Brilliant. And what about you, Ben?

Ben: So I'm on placement at the moment, a very different environment working from home from what it could well have been, but I'm with the Co-op, the food retailer not the funeral care branch, and essentially I'm in the agriculture team as a marketing coordinator, telling the story of where the food comes from and the hard work that goes into putting the food on the shelves.

Will: So are you in Manchester?

Ben: That's where I should have been. Currently, perhaps I'm in the best of both worlds. I'm living from home, so cheap costs, and on the farm when I get a chance, and working for the Co-op 9:00 to 5: 00.

Will: Okay. So what was it that made you want to go into agriculture in the first place? And Ben, were you one of those farm kids who grew up just desperate to be a farmer or what was it?

Ben: Yeah, I was really. Yeah, plenty of pedal tractors still hanging around somewhere. Yeah, it's a way of life, Will, isn't it? And I think that's been very much appreciated again through the pandemic and COVID, the chance to be outside 90% of your time really and be out in the fresh air, it's a way of life and something that we all really appreciate. And that's definitely a big pulling factor in why I did want to go into farming, I think.

Will: And what about you, Craig?

Craig: Yeah, always had a huge attachment to agriculture and the land use in general. I was never the best ploughman or tractorman, but I always had a real desire to go into agronomy and crop science, had a real interest in science behind arable agriculture. So I'm fortunate enough that my hobby is doing my job with regards to that. I take a real passion in it and I've always had a real interest in agriculture in general, but specifically arable agriculture.

Will: Brilliant. And what about you, Ed? What was it about farming that appealed so much to you?

Ed: So I've always had a passion for the outdoors and nature from a young age, and my parents involved me in vegetable growing in the garden at home when I was growing up, and then when I was 12, I decided to take on an allotment of my own in the local village. My love of growing vegetables and agriculture meant that this soon became two and then three allotments. And in addition to my passion for cultivating crops, I've also had a keen interest in the environment, and so striking this balance between increasing the demand for food in the future and the ever increasing need to protect the environment is really what cemented my decision to study agriculture, alongside my love for science and biology at school, and everything combined just meant agriculture felt like the right choice for me.

Will: That's really cool. So what does your course there that you're studying at the moment actually entail, Ed?

Ed: Yeah, so my course is a mixture of plant science, biology, and environmental studies. And so we study a range of things depending on what route you take. So I'm going down the plant science route, so I'm studying things relating to plant processes, such as photosynthesis and respiration, and also some biochemistry, and looking at genetic modification and how we could potentially improve crops for the future in order to boost productivity, for example. And in addition to this, we look at the environmental side of farming and how that could be improved in order to reduce the environmental impact it's having. And so all of that combined means we're looking at the plant science traits of growth, yield, chlorophyll, and photosynthesis combined with the genetic breeding aspects and environmental aspects in order to create this more ideal way of growing crops in the future.

Will: Brilliant. And what about you, Chloe? What was it that made you choose a career in agriculture?

Chloe: So I've always been interested in science and business, and I was always really outdoorsy, so I saw agriculture and going into farming as a way to combine that. So got started going to Young Farmers clubs and different farming clubs, and I thought it was a great community. So that's something I'm hoping to do with the research as well is contribute back to that, and it's something I'm doing in my current role as well, building a community of cattle farmers. So yeah, I think that's what got me hooked, really.

Will: Charlie, let's bring you in here. Tell us about how NFU Mutual has supported those wanting to get into the industry.

Charlie: Yeah, thanks, Will. So NFU Mutual has supported a large number of individuals involved in agriculture over the years, whether they've been undergraduates like Ben and Ed, who are recipients of ... I think, Ben, it was the 2018 undergraduate award, or postgraduates like Chloe and Craig who were involved in the NFU Mutual Centenary Award. The aim for NFU Mutual has always been to support individuals who are passionate about making a difference to the future of UK farming. There is cases though where those already involved in the industry may also want support, and we've been able to offer support through other initiatives, such as Nuffield Scholars, vie the NFU Mutual Charitable Trust. So there's a large number of opportunities, I say, that we offer as a company to really support individuals. Whilst we're on the topic as well, I'd also mention that the NFU Mutual Centenary Award will be available again in 2021, and applications will be open from January, so I just encourage anybody listening who may want to benefit from that scheme to check the website out and find out some more information.

Will: So why would an insurance company want to do all this? Why is it important that you support the next generation?

Charlie: So for NFU Mutual, it's much more than just insurance. I think as a mutual company, it's really important for us to be able to give back and support members, and particularly the next generation. Research and innovation are essential for agriculture and the industry to achieve improved productivity, sustainable management of our natural resources, and really the next generation is going to be key to that. And that's why it's so important for companies such as NFU Mutual to support promising individuals like Ben, Ed, Chloe, and Craig. And Ben, I know also with the work you do at Co-op, they obviously take a similar approach to supporting next generation. Over the years, I've supported a number of these awards themselves, and it's really clear that they're not only an opportunity for the recipients, but also there's a really unique and special opportunity for us as the company to listen and really learn from the experiences, which in turn, that obviously helps the industry by the products and services we then adapt and offer our members.

Will: Fantastic. So let's find out how NFU Mutual support has helped you all. Chloe, perhaps you can go first.

Chloe: Yeah, I suppose for me, it's been absolutely invaluable. There's no formal funding in my research area, and it's a title that I proposed myself, so I'm also working full- time to support this. So having 75% of the course fees covered from NFU Mutual made it doable for me in the first place, and the team have also been really supportive with the research and helping me gain access to opportunities to try and push that further. And it's also been really good looking for further funding opportunities that have got the backing of NFU Mutual. So that's been really, really helpful.

Will: And you, Craig?

Craig: Yeah, the NFU Mutual Centenary Award has been fantastic help for me. When I graduated with my undergrad, I was swaying whether to do a postgraduate degree or not, and then the NFU Mutual Centenary Award came up, and I saw it, and I applied for it, and I'm very fortunate enough to be awarded the award. Yeah, it's really changed my career aspirations, it's helped me get involved in agronomy industry, and eventually has led to me securing the job that I'm in just now. So it's been very positive all round.

Will: Definitely. And what about you, Ben?

Ben: Yeah, the NFU Mutual undergraduate award was what I had, and I was very fortunate enough to win it. It did, it changed my outlook on agriculture, partly because the financial aspect is fantastic, but it's more than that, it's the opportunities that it opened up for me from the first podcast of yourself, Will, and Jimmy, to go into the Oxford Farming Conference. That was something I never really thought I'd go to at my age anyway, at least. And events like that, you think back to all the time and think wow, I remember listening to that great speaker, and it's all because the NFU Mutual backed me in the end to go and do it.

Will: Fantastic. And what about you, Ed?

Ed: Yeah, the support the NFU Mutual has given me has been really invaluable and has really enabled me to pursue my studies abroad here in Australia. Studying at the University of Sydney, as well as undertaking my placement here in Australia has really broadened my knowledge and understanding of agriculture beyond the challenges that farmers face in the UK, it's given me a really much greater appreciation of the shared diversity of global food production while also allowing me to understand the specific difficulties and challenges that farmers face here in Australia. And as well as the academic enrichment that I've gained from studying abroad, it's also allowed me to experience the culture of another country. While studying here in Sydney in the university, and before COVID hit, I was able to travel around many parts of Australia and New Zealand with a diverse group of friends that I met at the university, which really was a highly enriching opportunity.

And the help of NFU Mutual really has been invaluable in allowing me to pursue this international venture. Not only has it allowed me to deeply immerse myself in my discipline amongst world- leading staff and researchers, but it's also meant I've developed a broad international understanding of key issues and ideas, and a cultural awareness which I wouldn't have otherwise had the opportunity to experience without the support of NFU Mutual.

Will: So let's talk about the industry itself. So in my opinion, it's a really exciting time to be in farming, although there are a lot of changes come in, so there are also challenges as well. So what do you all see as the challenges for the industry from your perspective? Craig, perhaps you can go first.

Craig: Yeah, it's a good point, Will. I think it's an exciting time for the industry, but there is always challenges. I think one of the key challenges for agriculture as an industry is communicating with the public. There are obviously less and less people involved in agriculture than say last 10, 50 years ago, 100 years ago, so the general public feels a bit more removed from agriculture than it did back then. So we've got to keep promoting positive messages from the industry so that we are producing high quality food sources to the general public and we're also managing the land to the best of our abilities. Obviously climate change is a very topical issue at the moment and everyone wants to talk about it, so there are so many different aspects and messages that we need to get across to the general public to show what we are doing to improve our industry and improve the best practice within the industry.

Will: And what about you, Ed? Where do you think the greatest challenges lie?

Ed: Yeah, so as I mentioned, really the growing global population means that the worldwide demand for food is obviously increasing at a really unprecedented rate. However, the cultivated land area is decreasing due to urbanization, the changing climate is making growing conditions more extreme and less favourable to production while the need to protect the environment is also becoming more and more important. Meeting this growing demand for food in harmony with protecting the environment for generations to come should really be a key aim of the agriculture industry from my perspective.

Will: Okay, thanks, Ed. And what about you, Ben? Where do you see the challenges?

Ben: Yeah, I completely agree with you, Will, there are some really exciting opportunities and an exciting time to be in the industry in general, but challenges- wise, I do think mental health is an issue across the board, whether it be the fact that there's such a small margin of error in farming, the pressure, the things that are out of your control with the weather, et cetera, and you actually as a farmer, are responsible for so much, and it's very easy to be weighed down with those responsibilities and pressures. And we've got great organizations, like (RABI) and the DPJ Foundation in Wales, but at the end of the day, it's something we've got to combat because, as Craig rightly said, there are less people in farming these days, and you can go a long time, especially in a pandemic, without seeing anybody and getting away from the farm. And so those support networks, unfortunately, are going to be vital going forward.

Will: What about you, Chloe? What are the challenges that you see?

Chloe: So I think mine probably links to what Ben was saying about mental health, and I see business resilience and planning ahead is a really big challenge. There's search uncertainty and volatility, so it is so important to plan ahead, but it can also be really difficult to know where to start or how to even go about that. And so I volunteer for the Farm Community Network, and they've got a Time to plan Initiative which they've teamed up with the industry bodies, and they're developing helpful resources to help the farming community manage through change successfully. So looking at planning for the unexpected, diversification, and post Brexit, and succession planning. So I think those kinds of tools, and then link in to how Ben was saying about mental health is a massive challenge for the industry, I think they're all interlinked. And that's a really big challenge, but there's also a lot of support opportunities out there through charities like Farm Community Network, their FarmWell website, and the helpline, which is open 7:00 to 11: 00 every day.

Will: And what do you think, Charlie?

Charlie: I have to agree, I think, with what everybody said. I think this year particularly, we've gone through real period of change. We've seen how technology and the way obviously everybody's communicating, buying things, everything has completely changed. And I think with that, obviously a lot of farm businesses have had to adapt. So I think if we look up and down the country, the local farm shops have been a real backbone of the community, and I think vulnerable people have been relying on them. And farming, I'd say the last year, has really become more and been seen as more than just simply going up and down the fields.

So for me, I think COVID aside, with Brexit that we've spoken about, the uncertainty that that brings with trade bills, and tariffs, and imports and exports, I think there's a lot of challenges, but then the benefit I would say is there's been a lot of positives coming out of farming, a lot of really good stories of farmers going above and beyond to support each other, new technologies, new practices. So yeah, I'd really echo, I think Craig, you said at the start, it's a really exciting time. Yeah, and I think just keep a good look out, see what's coming.

Will: So we talked about the challenges, let's talk about the opportunities. Ben, where do you see the opportunities in farming over the next 10, 20 years?

Ben: For me, I think there is a brilliant opportunity with the incoming of technology into the industry at such a fast pace. I think there's a brilliant opportunity to get young people involved with agriculture. We've struggled with this in the past, the average age of farmers is only getting older, but technology could become the almost revolution that changes agriculture and gets those people that have got that certain skillset that we will need for the future into the industry in an exciting time.

Will: And what about you, Craig? Would you along with that?

Craig: Yeah, definitely. I think the innovation in agriculture over recent years has been quite staggering. We've seen more and more farms using precision agricultural technology, such as GPS field mapping, to improve their efficiencies. And not only are they improving their efficiencies in output, with regards to yield and crop quality, they're also reducing their emissions and using less fertilizers, things like that, or more accurately applied inputs, which is a good thing (crosstalk) for us.

Will: And what about you, Chloe? Where do you see the opportunities lie?

Chloe: Yeah, so I absolutely agree with technology. I think on one count, like we've mentioned about connecting consumers with where their food comes from, I think using technology is a really accessible means for young farmers, as well as new entrants. So I rented a small bit of land and had pigs and hens on that, and using technology was a great way for me to connect with customers, so I think that's really accessible. And then also, like you say, in terms of agritech and precision farming, I've just started my new job with Breedr, and that's a free tool to monitor and improve livestock performance to drive greater efficiencies and performance on farm, and we're seeing that as a really great way that young farmers can get involved with the family business and work alongside the older generation to bring something new that's accessible for them, and can help inform decision- making and taking on responsibility.

Will: And what about you, Ed? As someone who's very much embraced the opportunities given to him, where do you see the opportunities for young people generally in agriculture?

Ed: So the opportunity to improve production efficiency through the development of genotypes, which are more tolerant to these abiotic stresses, and higher yielding, and unfavourable conditions, I think is a huge opportunity for the industry. In addition to this, I think combining the digital and the technological advancements that are constantly occurring, be it GPS technology, be it aerial drone, unmanned vehicles, robotic technology, both in plant science but also in livestock farming, such as robotic milking for cattle, I think really the agriculture industry has a huge opportunity right now to harness this biological knowledge of the genetic side of things and also the technological advancements that are happening to really secure the future of food production, but also do it in a way that doesn't harm the environment and really protects the environment for future generations. I think that's a huge opportunity that the agriculture industry needs to harness right now while it can.

Will: And Charlie, what do you think? Where are the opportunities for the next generation in farming?

Charlie: Yeah, I have to agree again, I think, with everything obviously all the guys are saying, agritech technology, the evolution of that is obviously so important. And I think Ed mentioned obviously the importance of genetics, and plant sciences, and crop sciences. And I think just the way that you can now apply multiple technologies, whether it's from genetic editing across to vertical farms, there's so much exciting technology that can really enhance the way we farm and obviously provide food for the future. I also think, thinking back to what we just spoke about on the previous question, when we look at mental health now, I think the stigma around there is changing, and there's a greater acceptance now with say of farmers talking to other people when there's a problem and starting to share issues more. And I think that's really reassuring to see, particularly over the last year. So I think the work that the charities, because there are so many of them that are supporting farming in the community to mention, I think they're all doing a great job and that's really positive to see.

Will: So let's talk about future career aspirations. Chloe, let's turn to you first. Where do you see yourself in the future?

Chloe: Well, I'd like to finish my research at last, so I'd love to see ways that I could implement the findings and learnings within industry to support other people and build a community around that. I think community is so, so important, especially how we're talking about the challenges and opportunities, and I see that as playing a really big role in that. So I just encourage other young people to join a community, be part of a community, whether that's Young Farmers or volunteering for a charity. I think it's a great way to equip you for the future.

Will: Ed, obviously such an exciting thing that you're doing out there, but what are your future career aspirations?

Ed: Yeah, so I would absolutely love to work in agricultural research, undertaking similar work to that which I've been carrying out while on my placement here in Narrabri. Carrying out research in order to find and develop genotypes of crops such as wheat or chickpea, which are more tolerant to the abiotic stresses of heat and drought that we're more likely to face in the future given climate change predictions, is of great interest to me, and I'd really love to be able to make a positive contribution to securing the future of global food production so that the changing climate doesn't threaten to limit productivity or lead to human malnourishment on a global scale.

Will: What kind of comparisons do you see, Ed, between Australian and British farming? I mean where are they at generally as an industry compared to where we are here?

Ed: Yeah, so I think over here in Australia, the really interesting thing about having studied over here and carrying out my placement here is that obviously the impact of climate change is potentially more pressing here in Australia, given the already extreme temperatures that Australia experiences. Climate change is increasing the frequency, intensity, and duration of heat wave and drought events, which really is going to severely limit the productivity, and the quality and nutritional value of the crops that are coming out of Australia here. Whereas the UK, maybe the more pressing issue there is the decreasing land area due to urbanization and urban sprawl. I think over here in Australia, given the vastness of the country, that is obviously less of an issue. And in fact, it's the decreasing amount of land which is viable for agriculture because of climate change, and the increasing risk of drought and heat wave that we're experiencing.

Will: That's so interesting. So what about you, Craig? Where do you see yourself in a few years’ time?

Craig: So in a few years’ time, I still see myself in arable agriculture. I think that is the (inaudible) of my whole work and for the rest of my career. Generally, I just want to keep on learning. I think as we just talked right in the last question, there's so much innovation in agriculture at the moment that the key to any successful business is to keep on learning and adapting to new technologies available. So hopefully in a few years’ time, I'm more familiar with the technologies that are just coming up and I can remain in the arable industry.

Will: And what about you, Ben? Where do you see your future?

Ben: So in the slightly longer term, I'd like to come home and farm, for sure. But in the shorter term, I'm going to go back to Harper and finish my degree. And then I'd like to go off and do something different, something that's still obviously based around agriculture, whether it be rural broadcasting or something connected into the industry, but away from actually being on farm, because I do feel that you can be a long time on farm if I was to return home at 21, 22. And I think go off while I've got the opportunity to go and do something different.

Will: Definitely. Well, it's been fantastic to speak to you all, and thank you very much for taking the time today. It gives me a lot of hope for the future of the industry to speak to so many inspiring young people.

That's it from this edition of Ahead Of The Field. From me, Will Evans, and everyone at NFU Mutual, it's goodbye until the next episode.