BBM Youth Support, Lord Forres Agricultural Award Report

By Christopher Hvass

Introduction:

This report is based on my time in the United Kingdom from the 18th of April till the 10th of June 2016 for a total of 53 days. During my time in the UK I spent the majority of my time with Internationally Recognised Alpaca breeder and Judge Tim Hey at his stud Inca Alpaca in the region of Dorset. During my time he took me on visits to several towns and villages and even Dublin, Ireland, to preform herd inspections along with health and bio-security assessments. While at Tim's I was also able to assist in shearing operations and at The Royal Bath & West show.

It should be noted that I had initially intended to spend my time with both Tim and an Agronomist however due to an unfortunate and unexpected evet, she was unable to take me on for any period of time during my UK trip. However, Tim was kind enough to take me on for the duration of my trip.

Tim's property overview:

Inca Alpaca, Higher Chilfrome, Dorchester, Dorset. Owner and Operator Tim Hey.

Stocking rate: 250 animals (Includes adjustment) on 40acres.

Tim holds and manages animals on his property that belong to other people this helps to offset the property running costs and manages the business risk.

The property has predominantly loam soils with chalks in the lowest areas. The Pasture is predominantly rye grass with a mix of various varieties. The pasture is also used to make haylage during the growing season as Tim cannot risk bring parasites or diseases onto his property by purchasing external feeds.

Hollywell, Farm stay:

This is where I stayed for the duration of trip, It is a great place to stay for people looking for a cheap place to stay that is secure and private and out of a city whilst still close enough to public transport facilities and within driving distance of most major regional centres (Dorchester, Yeovil, Weymouth) in South Western England. The price per night is quite affordable as they also provide a large assortment of breakfast meals. Anyone looking to travel in the Dorset region may benefit from staying there.

Another benefit of spending time there was that Stanley the owner keeps bees and was kind enough to teach me all about his bee keeping enterprise and was happy to show me the inside of his hive. He taught me to identify the Queen and Drones along with the Scouts and Workers. He showed me all about the life cycle from the larva to the full grown worker. As well as showing me how to identify what pollen they were harvesting so that he could then gain a rough idea of what type of honey would be produced and what sort of flavour he could expect. This all has an effect on his profit margins as he showed me in his books. I was successful in identifying that the bees had sourced their pollen from Rapeseed Oil Plants which means that unfortunately, due to the density and adhesive properties of the honey made from rapeseed oil, the honey in this batch will most likely have to be thrown out as it will set extremely hard, will taste bitter and won't sell for very much at all.

Trip Summary:

My trip consisted of working with Tim every day and being on 24hr call with him as its birthing season. Tim took me to a lot of property's and places, including; Mullingar in Ireland, Buckingham, Birmingham, Temby in Wales, Bristol, Evershot Vet. Several of these areas had a lot of properties

around them that we visited, while all of these showed me a new aspect of life and Agriculture in the UK, there were some properties at which I did very little aside from observe. For example, at one property there were 2 animals.

In this report I will try to summarise everything I learnt about agriculture in the UK. There are some major differences between UK and AUS, the ones I believe affect this industry the most are: Climate, Parasites & Diseases, Nutrition and Market conditions.

I will also be covering my time in Ireland, shearing, The Royal Bath & West show and a short paragraph on general differences and observations.

Climate:

The greatest difference between Australia and the United Kingdom is the climate. This sounds obvious but it has major effects on fleece production, herd management, birthing rotations, animal growth periods and several other aspects of alpaca production. The Freezing temperatures through winter severely reduce the time frame for shearing and birthing as no animal will survive the freezing temperatures without sufficient fleece and body weight. This also holds increased risks for older animals or those with disease, parasites or congenital issues that lead to reduce nutrient absorption and a reduction in body weight. In these way herd management in the UK would be more complex than that in Australia, that said, in certain regions carful management of the heat is required. From my observations while in the UK most breeders are prepared for this weather as all have large animal sheds and field shelter that allow their animals to shelter from the elements.

The majority of breeders run their shearing and management plans as to prevent environmental deaths and while this is done in Australia it does not appear to be as effective in preventing deaths from exposure. That said more animals die in Australia from heat exposure rather than cold exposure.

The climate in the UK also means that more intervention during cria birthing. In Australia it is most common just to let the dam (pregnant alpaca) to do her work without human intervention unless there is a complication. After birth the membrane around the cria's head and checked to ensure that the nose and mouth are free from obstruction and then the animals are left to their instincts while under observation. In the UK the cold weather prevents the practise of just leaving them to their instincts as the cria would quickly die from cold. So the procedure at Tim's property is that as soon as the cria is in the ground, the membrane is removed from the entire body and the cria is towel dried and as soon as its standing it is coated with a thermal coat. This process seems to me more labour intensive but it's certainly critical in the conditions as even though it is summer there are several very cold nights that could kill a cria.

Parasites & Disease:

Tim is at the forefront of Bio-security in the UK regarding Alpacas as they have several diseases, virus and worms that are not currently present in Australia. He often meets with local Veterinary Institutes to discuss local issues such as seasonal worm management strategies and disease outbreaks. I was lucky enough to be invited along to one of these meetings where it was agreed that the research paper being put forward by Synergy Farm Health clinic, a larger vet practise, in conjunction with The Scottish Agricultural College, would involve several alpaca farms in this region.

The research paper is aimed to improve worm burden diagnostics, identify which animals are susceptible to which worms and which aren't, this information would allow breeders to selectively breed for worm resistance. This would also then allow breeders to have the worm eggs cultivated and identify which worms are present of their property. The current method of 'Mob' testing can tell

you the same thing but on a mob scale, therefore you can identify particular problem animals. This is what the research paper is looking to change as doing a Mob worm count is not particularly useful in alpaca herds. It is my understanding that in Australia this Individual worm testing is already common practise and in this it seems that the UK is behind the Australian Alpaca Industry.

In this meeting it was also mentioned that the *Haemonchus contortis*, better known as the barber pole or wire worm, is resisting medications more and more and that breeders of both sheep and alpacas need to be looking at other ways to manage their worm burdens. The British Camelid Vet Society is offering links to a website that shows the success of scientists in South Africa developed a system called FAMACHA which is a comparison chart that you compare the colour of the sheep's lower eyelid to a score card to determine its "eye score", this score can help you in the decision about whether to medicate or not. This also allows you to only treat the animals with clinical signs of parasitism instead of treating all of the animals in the flock. This helps to slow down the rate by which the worms become resistant to the drugs. This system is currently in place for sheep but converting it to account for alpacas is in progress. This system is used in Australia for sheep but should a system be created for alpacas it would be a great boon for both areas of the Industry.

There are several more diseases present in the UK that are not present in Australia a few of these are, Foot and Mouth disease, TB and BDV as such, instead of burying their deceased livestock the have them burnt at a local disposal site.

Alpacas in the UK are exported to several countries in Europe and can export into any country that has a trade agreement with the EU, the only exceptions to this are; China, due to Blue tongue disease and Australia as mentioned above.

Tim was lucky enough to have the resources to surround his property with a 3m wide laneway which is fenced by hinge joint and an offset electric fence line, just above ground level. This provides a good barrier that aims to prevent badgers and other ferial animals from crossing onto the property and coming into contact with the alpacas and transferring diseases. This barrier provides a very good management tool and aids in the prevention of disease and pest movements.

Nutrition:

The base pasture nutrition in the UK is much higher than in Australia, this makes pasture and animal management much more difficult and requires more planning and observation.

The pasture at Tim's property consists of a mixture ryegrass, daisy's, clovers and other pastures that I was unable to identify (Tim has little knowledge when it comes to soils and pasture) that is used as grazing pasture and to make haylage for feeding out during the winter period of low feed. This way Tim doesn't risk bringing infection onto his property through feed transports.

There is an interesting condition called "Staggers" of which the most common is Rye Grass Staggers, caused by a toxin producing endophyte, however there is also a condition known simply as Grass Staggers which is a magnesium deficiency. Ryegrass staggers typically occurs in Spring or in Autumn when conditions mean that the grass is nibbled close to the soil. Grass Staggers is prevalent in Spring or during a cool, damp Autumn. Grass Staggers is normally seen in pregnant and/or lactating females.

Given the conditions and pasture make up, I would have assumed that these conditions would have been a concern here in the UK however many of the places I've been too say that they have no concerns regarding staggers as they all feed out mineral supplements to counteract the effects. The conditions for "staggers" to affect alpacas is quite common in Australia despite the feeding out of nutrition blocks and the managing of pasture. Having done some research into this, I am lead to believe that the reason Australian alpacas suffer from "staggers" more frequently, is due to the increased sulphur levels and decreased phosphorus levels in the soils. Leading to a mineral deficiency in the pasture and then that is transferred to the animals.

Market and production:

Before traveling to the UK I did some preliminary research that lead me to believe that the production market here in the UK was vastly different to that of Australia however having seen it firsthand now I can say that while the markets are in different orders of priority and with different levels of demand, they are essentially the same.

The markets are the same as in Australia with the exception of the meat industry, the UK has no industry for meat. These industry areas are; Wool/Fibre production, Pets, Herd guards and Show animals.

While these priorities vary depending on each individual's business plan, the industry in general promotes alpaca production for Fibre production and showing. This way the alpaca genetics will be improved across the whole industry and not just with a select few breeders.

General Differences:

There are several differences in alpaca production and general agriculture in the UK that don't fit into any of the major differences that I feel are worth mentioning.

The use of wooden fencing posts with 7 or 8 single line wires is the most common form of alpaca fencing, that given the high moisture content in the soil and as a result high microbial activity, seem to be a very inefficient material for fencing, when asked why use wooden fence posts when metal would last a lot longer, the most common answer is along the lines of "that's how it's always been". This does not seem like a smart way to run a farming enterprise.

The cultivation of the soils is managed differently with minimum tillage operations being combined with Controlled Traffic Operations. This has resulted in a very carefully managed soil cultivation system that would be considered a High Intensity Farming enterprise. This appears to be a very common practise across the Dorset region.

The practise of exporting and importing alpacas across Europe is extremely profitable but it has extremely high risks. The chance of carrying diseases across the border is high even with current testing procedures. This would be a huge benefit to Australia if we could begin to export and import alpacas worldwide however importing to Australia would be extremely difficult as we cannot risk bring the diseases in the UK and Europe into Australia.

The United Kingdom's Agricultural Industry does not appear to use a standardised stocking rate measurement. To better explain this, Australia uses the DSE (dry sheep equivalent) to calculate a rate of feed consumption of a particular animal. This, used in conjunction with a pasture's dry matter %, can be used to calculate what animals and how many animals can be run in a paddock for a set period of time. In this way most farmers and stock hands can look at these calculations and understand exactly what is going on. The farmers in the UK manage their paddock rotations from experience and their observations. I have no doubt there are farmers in Australia that use this same method I was just very surprised to find that there was no industry standard in these calculations.

Ireland:

My trip to Ireland was very informative and interesting, I only visited one farm however at the property a meeting was held with members of the AAI (Alpaca Association of Ireland) during which I learnt a lot about the industry in Ireland.

While Ireland does not fall into the United Kingdom the climate and conditions there are so similar that most of what applies to the UK applies to Ireland with one major difference. The Industry body and/or organisation is only just beginning. The alpaca industry is very young in Ireland and with only roughly 2000 animals registered nationwide compared to the United Kingdom's national registered herd of 35,000 and a predicted number of 10,000 unregistered animals. Irelands industry is just starting to emerge with several owners already investing a lot of money into importing high quality animals.

The markets in Ireland are limited due to low public interest however the property I visited was in the final stages of installing a wool mill designed to process alpaca fleeces, which once operational will be the only mill of its kind in Ireland.

Ireland has lower biosecurity restrictions than the UK as well as less import/export regulations as they have all but eradicated BVD and Foot and Mouth. This allows them to export animals more freely than the UK. This, combined with the fact that Irelands base animal genetics are of a better quality then most of Europe and the UK, will hopefully turn the currently struggling alpaca industry in Ireland into a very high quality and high production industry.

Shearing:

Shearing operations at Tim's property was scheduled to take 3 days, however due to rain and cold conditions it was initially postponed by 1 week. Then when shearing did come around it rained most of the weekend which resulted in an extra day of shearing. My duties during shearing included; vaccinations (lambivac, similar to 5 in 1), cutting the toe nails, treating animals that have mite infections with frontline, catching and throwing, mustering, fleece classing and fleece skirting. Tim taught me several new techniques for injections, classing, skirting and a new skill of treating mite infected animals with front line. This is not common in Australia as mites are often treated with a drench solution.

The shearing was mostly the same as in Australia, however the use of cover-combs is common place of all alpacas here in the UK while in Australia they are rarely used aside from in the high altitude regions.

The Royal Bath and West Show:

The Royal Bath and West show is one of the largest shows in this region of the United Kingdom. In 4 days is had .25 million people through its gates, many of whom would have walked right past the alpacas, hopefully stopping to have a look on their way. From the 2 days I spent at the show, here in the UK the public interest in the alpacas is huge, with a lot of people asking very intelligent questions regarding their up keep, habits, management and characteristics. I believe that, by shear mass of population, the alpaca industry here in the UK has more public interest if not as much public concern. By this I mean that here in the UK alpacas are a curiosity to be looked at, farmed and for people's children to come and see, whilst in Australia people seem more concerned in making sure they don't get spat on, with little regard for the animal themselves.

At the show I was surprised to learn a number of new things and was lucky enough to be able to present an animal in the supreme championship round. A photo of this can be found in the photo section.

The alpaca judging system here in the UK is different to Australia's system in the fact that in Australia the judge is not told who the animal belongs to or anything but its age, fleece growth period and its judging number. This means that the judge cannot preferentially vote and it eliminates any sort of biased judging however here in the UK the judge is given who owns the animal and which stud it comes from. This means that should the judge not like your animals or you as a person he/she can easily alter the judgment either consciously or unconsciously, thus changing the outcome. In my opinion this is not how judging should be performed.

I was able to take some time away from the Alpacas and look into the sheep industry here in the UK. I have my Australian wool classing accreditation and had always assumed that we based our classing models off the UK industry, looking back this was a very silly assumption, as the 2 climates are completely different so as such the classing and sheep breeds are very different. The UK industry has no real area for superfine or even fine wools and so all of their wool classing can be done in sorting houses and doesn't have to be completed at the time of shearing which is what occurs in Australia.

Another difference is the prioritising of wool faults. In Aus we remove class (mostly) according to fineness however here they class (again mostly) according to character and strength.

These difference are very interesting as is the way that the shearers and wool handlers almost completely rely on the grower to organise the mobs into suitable bailing groups. In Aus this is done by the wool classer and not the grower. This must put a lot more stress on the farmers at shearing time than how it is done on Aus.

Recommended Places to see:

Depending on your area of study within agriculture, I would suggest anyone looking at environmental conservation and soil studies go to Brownsea island. A lot of environmental conservation and reestablishment going on there. I would also suggest anyone looking into alpacas visit Tim Hey at Inca Alpaca as he is extremely knowledgeable, has years of experience and is willing to take new people on and teach them about the industry.

I recommend that anyone looking at visiting the Dorset region visit the Hollywell Farm stay, it is very affordable and the owners are accommodating, very kind and as well if anyone is interested in apiculture the owners are more than happy to show you their enterprise.

Conclusion:

In conclusion, my time here in the United Kingdom and Ireland has been an amazing experience. I have learnt a lot of new things about the industry and the UK in general. I have a greater understanding of alpacas and how different climates effect their production. The Industry organisations in the UK are different but similar to Australia and we would both benefit from a greater sharing of knowledge and resources. I have seen places I never though I'd get to see and experienced the United Kingdom's agricultural industry in a light that few would get to see.

I would like to thank you for this opportunity that I have been granted and I am confident that I utilised my time here as efficiently as possible.

Photos:

















