

## Future Farmers of Wales AGM and Farm Visit 11<sup>th</sup> November 2017

A visit to Sychpant Farm, Rhoshill, Cardigan on Saturday 11<sup>th</sup> November at the Future Farmers farm visit and the Annual General Meeting.

A good turnout of members, families and friends, were greeted by Tom Allison and his brother Marc Allison who farm along with family at Sychpant Farm on the outskirts of Eglwyswrw, north Pembrokeshire.

The family's dairy herd of Holstein Friesian cows are milked 3 times a day and fed on a mixture of high concentrates and arable forage.

After an overview of the farming system, Tom and Marc began discussions on a number of technical matters on the dairy farm to include a new milk pump, which works with a custom sensor within the receiver vessel to control the flow of milk from the milk pump to the bulk tank. The system looks to minimise mechanical force upon butterfat; potentially increasing the shelf life of the milk and milk quality.

Originally, it was hoped that for a target of increase of 0.1% butterfat, however, the 1st pump designs featured rubber impellers which were difficult to prime and are easily damaged if run dry. This system only

has plate coolers to cool down the milk before going to the tank, again preventing the rapid cooling of the milk which can have an adverse effect on the butterfat value of the milk. The milk is at its most vulnerable when it is warm and so there are many opportunities where improved hardware could help milk quality. Another possible investment would be to have a bottom filling milk tank to prevent further damage when entering the tank.

The family use uniform agri to record data to record milk yields and showed the group that the average cow produces 38kg of milk.

In the 16/32 milking parlour, new milking unit liners were installed into the milking unit when the parlour was renovated in 2015, it was the first farm in the northern hemisphere to have installed this. There has been very little mastitis since the system was installed, however improved prepwork, sand bedding and 3x milking are also contributors to excellent quality.

The farm benefits from array of solar panels and a wind turbine situated next to the homestead generating power to the farm.











The main livestock housing sheds houses 250 number of cattle and is specialist designed with polycarbonate sheeting surrounding reducing the UV penetration that would otherwise (with conventional clear plastic cladding) causing a greenhouse effect in the building. The building and is designed to provide 16 hours of light which,

as demonstrated by researchers is believed to increasing the milk yield by about 8%-12%. Light suppresses Melatonin levels, stimulating milk production and increasing DMI.



A specialist design flood wash system with a concrete casting cubicle design allows easy wash out of the passages and doesn't affect the sand bedding quality that the cows lay on.

The building has specifically been designed for increasing air flow of natural air, whilst the building can be completely sealed from birds with a central feed passage for easy flow of machinery and livestock. The fans direct air onto the cows to improve comfort and to remove poor quality air (methane, ammonia, Hydrogen sulphide, carbon Dioxide)



The shed has stainless steel water troughs, believe to provide better taste of water and are regularly emptied and cleaned. The water is sourced from rainwater harvesting to a storage tank. The family have suggested that algae growth in the tank is undesirable and a problem. The water is filtered and UV treated before entering the water system for the livestock.





The family have designed a special sluice runway system to catch the sand from the cattle bedding after the flood wash system, this is an array of channels of which the sand particles being denser drop to the base of the chamber and can be removed with a digger or tractor.

The farm certainly is an innovative and an inspiring holding, using the practical resources of Marc and the technical knowledge of Tom and are continually trialling and testing various new methods, systems and technologies to improve the use of labour and management of the holding to produce milk of the highest quality.

We thank the Allison family for their kind invitation and we wished them the very best in the future.

