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Bug Farm Foods

NATURAL, SUSTAINABLE & DELICIOUS FOOD FROM WEST WALES



Introduction:

Bug Farm Foods was born from a shared passion for innovation, science, the environment and delicious food. Chef Andy Holcroft and entomologist (insect scientist) Dr Sarah Beynon have come together to develop a new generation of delicious, insect-based foods that are good for you and good for the environment.



The journey began in 2013 when Sarah and Andy, who are both experts in their fields,

bought back Sarah's old family farm, Lower Harglodd, on the outskirts of St Davids, Pembrokeshire. A year of renovation works led to Dr Beynon's Bug Farm (or 'The Bug Farm') opening as a research centre, working farm and visitor attraction showcasing their passion for sustainable agriculture and delicious food.

Sarah's research in sustainable food production and, in particular, entomophagy (the eating of insects) inspired Andy to experiment with new recipes using insects, with the aim of replacing traditional meat products with insects. Their whole philosophy is to develop foods using more sustainable ingredients that

will also provide you with more nutritional value, including higher protein content, omega 3 and amino acids. These trials soon evolved into dishes on the menu in Andy's restaurant 'Grub Kitchen' at The Bug Farm, the first full-time entomophagy restaurant in the UK.

Three years on and the Bug Farm is an award-winning attraction and academic centre of excellence, winning the Best Start-Up Business of the Year in 2016 and the Sustainable/CSR/Green Business of the Year in Wales in 2017. Grub Kitchen is also busy scooping awards in its own right, winning the Innovative Business of the Year for Wales award in 2017.

Following a programme commissioned by the BBC called 'The Bug Grub Couple' (aired in August and December 2017), they started to develop their Cricket Cookies under their new Bug Farm Foods brand. The aim was to create a cookie that gave consumers an easy way in to including insect protein in their diets.

The development of their Cricket Cookies from kitchen to food manufacturing was a big step, but one that has been very successful. The programme helped raise the profile of the business further and the new Cricket Cookies have been very popular, particularly with the gifting market.

Support Provided by the FCW: Tasked with developing the Cricket Cookies into a commercially viable product, Andy and Sarah contacted Food Centre Wales for help. Firstly the Food Technologists worked with Andy to re-formulate the recipe ingredients to create a product that could be produced on a larger scale. Once the recipe was up-scaled for small scale manufacture, the process of making the cookies was developed. As Andy had been making the cookies by hand in small batches until now, this was not commercially viable for a

larger scale production.

The Food Technologist adapted an existing machine to help with automating the cookie cutting process and increase the production times.

"Plunging into food production was initially very nerve wracking mainly because we wanted to do it properly. However, the support and guidance from Food Centre Wales was fantastic and totally put our minds at rest. We had the peace of mind that we were doing it properly from day one and that we weren't making any mistakes."

The Food technologists helped with HACCP and becoming registered with the Council Environmental Health Officer. Once the product was developed they have also done microbiological nutritionals, shelf life testing and calculations for labelling.

"The Food Technologists at Food Centre Wales have really mentored us throughout the whole process and passed on their knowledge to us so we are confident in utilising the new skills we have learnt from them. Their support has been invaluable and if we have a problem or want to know something, we can just pick up the phone and ask them."

Benefit of the Support:

All the support The Bug Farm have received to develop the Cricket Cookies and get them into the marketplace has been funded through Project HELIX, which is a Welsh Government initiative delivered by Food Innovation Wales under the European Agricultural Fund for Rural Development Fund. Had this support not been available at Food Centre Wales, the company would have needed to fund the new venture themselves.

"We are a small business start-up and did not have the capital to invest in developing, testing and setting up the processing. Also, we were not experienced at manufacturing, so we did not have the knowledge needed to progress with the idea. Had we not been able to go to Food Centre Wales for support we would have spent a fortune on consultants and we would have had to risk investing more money into another experimental venture, which we probably would not have done".

The support offered by Food Centre Wales has enabled Bug Farm Foods to get off the ground. They have been able to learn everything they need to know about running their food processing business and have had the peace of mind that someone is at the end of the phone if

they need additional support.

Future Plans:

Since then, the couple have successfully secured more funding through the Welsh Government and Innovate UK SBRI project to develop food products containing insect protein for consumption in schools, to reduce salt, sugar and saturated fat in children's diets. This funding is also enabling the business to expand and build its own R&D facilities onsite at the farm, which will enable them to develop more new products to add to their Bug Farm Foods range.

The Food Technologists from Food Centre Wales are assisting them with the layout of the new factory and sourcing the equipment required. Once completed, they will also help with HACCP and getting the facilities ready for approval by the council Environmental Health Officer.

Sarah and Andy have lots of ideas for products they would like to explore and they intend to continue to expand the Bug Farm Foods product range in the future.

