

Farming Connect Management Exchange



Funded by the Knowledge Transfer Programme, part of Welsh Government Rural Communities Rural Development Programme 2014-2020

FARMING
connect
cyswllt
FFERMIO

Richard Hughes

Italy

Snail farming: market research and farming techniques

June 2018

Background

The aim of the visit, funded by Farming Connect's Management Exchange, was to research the snail market and learn about snail farming techniques. My aim was to identify if there are further opportunities to develop the snail business in Wales. With the uncertainty of Brexit and agricultural grants, I am aware that we need to consider all kinds of diversification enterprises to ensure the future of this family farm that has been part of our family for over 300 years.

I had researched the subject before making the application and was confident that there was an opportunity to create a successful enterprise here in Wales, mainly due to the country's climate. There is an interesting presentation on the subject of snail farming written by SRUC here:

https://www.sruc.ac.uk/info/120183/alternative_livestock/301/snail_farming_heliciculture

The Visit

During June 2018, I visited Cherasco, Italy, to visit the international institution, Istituto Internazionale di Elicicoltura

(<http://istitutodielicicoltura.it/it/en>). The institution's work is internationally renowned and so it was a perfect place to visit and learn more about snail farming.

The institution was established in 1973 and now, 45 years later, it employs 15 people, all of whom are specialists in their field. This area in northern Italy is very famous for snails and people come from all over the world to learn about the sector. The institutions also offer weekly courses with around 10 people attending each course.





The photos on the page above show the scale of the farms in the region.

Cherasco

Cherasco is a very small town with around 2,000 living in the town itself, but the wider area has a population of 9,000. There was a strong community spirit in the town and everyone was very fond of snails. Snails of all kinds were on the marketing and publicity materials in the town, which reflects the fact that the town is renowned for the produce and its work in the sector. The region is also famous for their 'Slow Food' with the food festival in the neighbouring town of Bra attracting 150,000 people every other year. The snails are bred in this way and grazed outside throughout their lives in purpose-built pens.

The course

The course began at 9am and the first morning discussed and demonstrated how to build an 'external' fence, i.e. the fence that stops other animals from disturbing the snails.

A ditch is dug in the first instance, and posts are then placed 400mm into the soil before placing plastic/fibre glass is placed in the holes. The aim of this is to stop animals such as mice from digging in and getting to the snails as well as keeping 'wild' snails out.



After building an external fence, pens need to be built for the snails. These pens measured 45m x 3.5m.

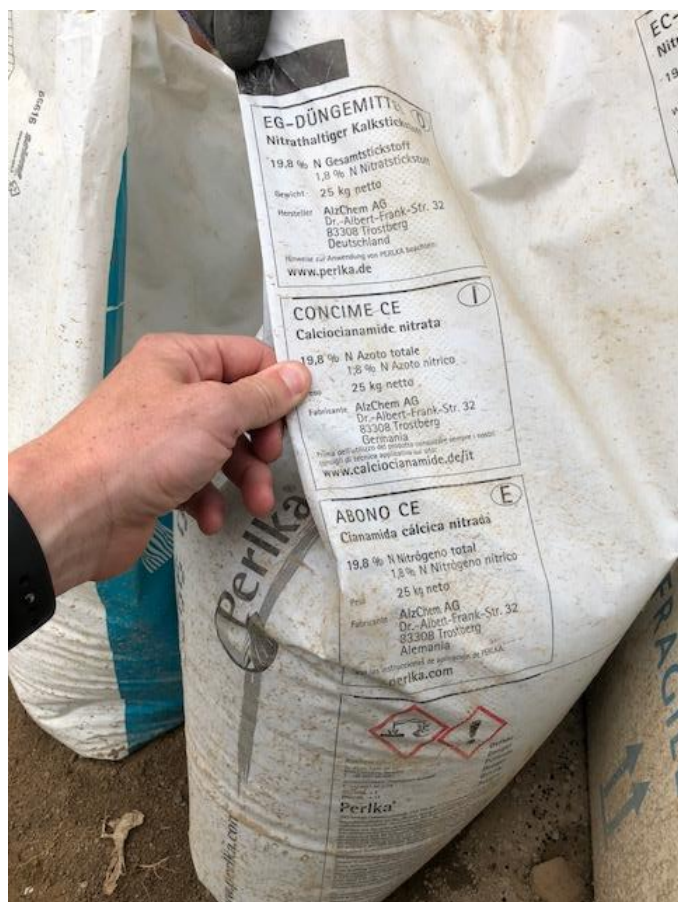


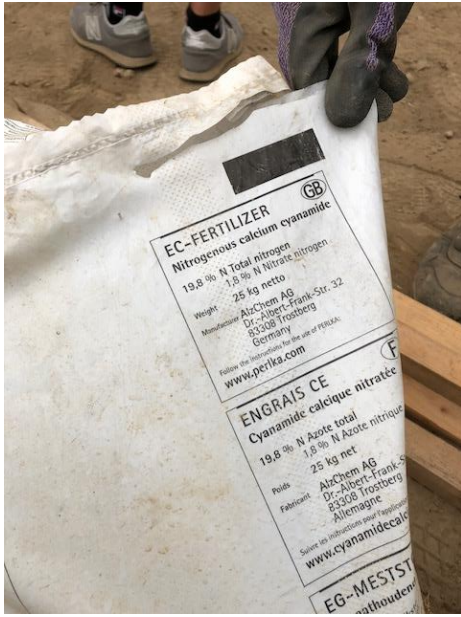
A special plastic netting fence is placed around the pens and each pen is split in two, 40% for breeding and 60% for growing/fattening.



Before sowing the land within the pens, the soil needs to be cleaned to remove any flies that threaten the health of the snails. It is necessary to kill the bugs and 'Calcio-cianine Nitrate' is used to do this. Of course, UK regulations would need to be checked before using this product.

We also had a good discussion regarding what the snails eat and how to sow the seeds for food. The edge of the pen is sown with white clover in the first instance. Followed by Chicory, beets or winter brassicas, Chard. The first sowing will take place in March (the 40% area) and the rest in July.





The pen also had to be fertilised. Firstly, the soil pH should be around 6.5 as well as ensuring that there is plenty of lime on the soil, which is essential for growing healthy shells for the snails. The rest of the fertilised follows the standard agricultural practices for growing crops such as beets and brassicas. They used standard fertiliser at a rate of 15:15:15. I would need to assess the soil and test the land on the farm before starting the enterprise.

I would like to thank Alberto for delivering the training over both days.

Markets

During the visit, the following markets were identified:

- Schools
- Visitors
- Slime
- Food
- International
- Food for pets such as snakes and other reptiles

Schools

During the course, 7 primary school children visited the farm. They were given an introduction to the farm before completing a workshop painting empty shells. Before finishing the children were allowed to go and search for snails and taking one home with them!

The children obviously really enjoyed the experience and this is a market that could be developed if someone decided to go on to develop the business. It is something completely different, fun and the children love it.



Visiting a snail farm would be of educational interest as it would give children the opportunity to learn about:

- Nature
- Art
- Creative writing
- Mathematics
- Geography
- And much much more!



Visitors

It was evident that the work in Cherasco creates a visitor market in itself. People come from all around the world to the town to learn about farming snails. Also, the town was known within the region for being famous for the specialist produce. It would be possible to promote a snail farm to visitors wishing to learn about something fun that is very different in Wales.

Slime

Whilst we were on the visit, we were very keen to learn more about the slime that is a very valuable bi-product. There is a substantial market for snail slime as it is used in make-up.



We got to see the 'muller one' machine which is used to extract slime safely without affecting the snail.

Undoubtedly this could be another potential market that could be developed in Wales.



Food

The market for 'Escargot' in French and 'Chiocciola' in Italian is well known to everyone. The snail is a nutritious meat full of protein and iron as well as minerals such as potassium and phosphorous. There are 90 calories in every 100g of snail meat, with the majority coming from protein.

The snail is usually served in a sauce and there are many sauces available. The most common is probably the garlic sauce. It is possible to compare the experience of eating snails with eating cockles or mussels. Unexpectedly, there is also a market for snail caviar (eggs). Producing caviar means finding and bottling the eggs.

The experience and fun of eating snails contribute greatly to its appeal.

<https://web.wpi.edu/Pubs/E-project/Available/E-project-050517->



Whilst walking through the streets of the town, it was clear that many local shops were doing some great marketing relating to the appearance of snail products and window displays. The bottles were very attractive.



International

I had the opportunity to meet the director of the company who was keen to trade with us in the long term and buy the produce back from us. This is a very easy way of reaching an unexpected market.

Pet food:

Snails are used as food for pets such as snakes and reptiles. I have noticed that many advertise this on e-bay. More research is needed in this area but I'm sure that it would be possible to produce snails for this market.

Commercial and business elements

There is an uncertain aspect to the business as there isn't an existing market in Wales at the moment. However, there are a number of businesses in England and Ireland. The director of the international body was thrilled that I was from Wales and said that our climate is perfect for farming snails. Thinking about it, the climate is mild and wet enough, which is ideal for snails as all gardeners know only too well! He was very keen to work with us and prepared to buy all our products!

Benefits compared to other diversification opportunities

- Relatively low establishment costs
- Very good margin over capital.
- Sits well with a tourism venture already based on the farm

An article in the Independent in 2014 states that:

“Production across the UK is estimated to have increased from around 30,000 snails per annum in 2000 to more than 750,000 this year, as Britons shrug off their traditional disdain for the allotment-raiding molluscs and reach for the garlic butter.”

The Irish Food Board reports as following:

“The global snail market was worth approx. \$154M (43k tones) in 2016 at wholesale prices and has seen growth of \$42M (or 13%) from 2007 to 2016 (UN data). The 6 biggest value added (prepared) importers of snails in descending order are: France, USA, Japan, Canada, Germany and Belgium.

France is by far the most significant snail market, importing \$48M worth of snails and exporting €26M. France imports 90-95% of the snails that it consumes – and most are picked in the wild in eastern European markets (Romania is no. 1)

Snails in France are a very traditional market, eaten mostly during the Christmas festival period and almost always cooked in their shells with garlic butter and herbs. 95% of consumption is the Burgundy snail (Helix Pomatia) – whilst the Petit Gris only makes up 1.5% of the market. In retail, snails are mainly sold frozen and stuffed (55% of the market) or otherwise in tins of snail flesh (ambient) alongside empty shells, which are later stuffed. Grocery retail prices range from €40-€60 per Kg.

Spain and Italy are also large snail consumption markets. Spain imports \$8M worth of snails per annum – at very low prices and predominantly from Morocco. Snail consumption is focused in the north of Spain and the snails are used in a variety of dishes. Italy imports €5M worth of snails per annum mainly from Tunisia and Algeria.”

Rules

An article and guide has been published by the Scottish Food Standards Agency which is very useful and relevant to Wales. I see that all these rules are set by the EU and so Brexit could be a problem http://www.foodstandards.gov.scot/downloads/Guidance_Document_1.pdf

Next Steps

The next steps following the visit will be to:

- Test the soil
- Learn about any potential infections
- Create a detailed business plan
- Undertake further research and legal advice regarding producing snails in the UK
- Undertake further discussions with the Istituto Internazionale di Elicicoltura Cherasco

I would like to thank Farming Connect for this opportunity. Without this support, I would not have taken the first steps to consider the rough idea I had. Following the visit, it is clear that there is an opportunity to develop a different and viable business in the long term. This visit has given me the information and confidence to consider establishing a snail farming business here in Wales. If I venture having successfully completed the steps above, our succession plan will be reinforced and the future of the farm stays under the control of the family for one generation at least.