

Pig Case Study Hungary 1

Organic traditional breed system, Nyírbogdány

Extensive system with rare breed Mangalica pigs, partly for export for premium hams

Nyírbogdány farm breeds and grows the Mangalica, or hairy pig. This is a traditional breed adapted to the cold Hungarian winter. The development of an export market in Spain has helped to save this rare breed from extinction.

The Mangalica breed

There are three separate coloured varieties of Mangalica – red, yellow and white. A fourth black strain became extinct in the 20th century. The Mangalica is a rare, traditional breed from Hungary that is adapted to free-range farming. Traditionally, the pigs were turned out into the woods to fend largely for themselves.

A thick coat of hair and a very thick fat layer help to protect the Mangalicas from the cold Hungarian winters. Since vegetable oil became widely available, the market for the 'lardy' Mangalicas declined in Hungary. Up until 1991, the breed was in danger of extinction.

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The Mangalicas have a thick coat of hair and a thick layer of fat to protect them from the cold Hungarian winters

There is now an export market to Spain, which has a tradition of keeping pigs in woodland, the natural habitat of the animals. Iberian pigs, fed on acorns and taking over a year to reach slaughter-weight, produce hams of a particular quality. Premium prices are paid for them (see Pig Case Studies Spain 1-3).



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Unique rare breed, adapted to the climate

In 1991, Peter Toth, in conjunction with the Spanish ham factory Jamones Segovia Sa, developed an export market for Mangalica products. Along with Spain, Holland and Italy are also becoming important markets for Mangalica products. Small markets are developing in a range of countries including Hungary, Germany and Sweden.

Peter Toth has developed the breed lines and contracts production out to about 40 producers with 2000 pigs between them. Nyírbogdány farm is one of these producers with around 50 sows and their progeny that are looked after by 3 stockpeople.

Nyírbogdány farm

The methods of production on Nyírbogdány farm are very simple. The sows and their progeny all share extensive paddocks, each with a large barn (approximately 400m²) that is deep bedded with straw. The pigs are locked into the barn at night to protect them from foxes, dogs and wild boar. They are released during the day and are free to roam the paddocks. The paddocks contain good pasture cover, edible plants, shrubs and trees, including mature fruit trees. This variety of different environments closely resembles those naturally inhabited by wild and feral pigs. It allows foraging behaviour that may occupy as much as 75% of time in a natural environment.

Foraging behaviour includes:

- Sniffing
- Rooting
- Chewing
- Eating

Food comprising mainly corn and fodder is thrown into the paddocks. In addition, the younger pigs have access to 10 hectares of orchard.

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The pigs can browse on the fruit trees

The main welfare benefits of the system are:

- The breed of pig is hardy enough to remain outdoors all year round
- This rare breed has small litters which puts the sow under less metabolic pressure
- All pigs are free to roam around in the paddock during the day
- The paddocks are enriched with various forms of vegetation including fruit trees
- Rails and barriers to protect the piglets from being accidentally crushed
- There is no teeth-clipping or tail-docking

On Nyírbogdány farm, the sows have just two litters per year and give birth on average to 6 piglets. In comparison, sows in conventional intensive production have 2.3 litters and give birth on average to 10-12 piglets. This level of production makes huge metabolic demands on the sow. They can soon lose condition and are often culled after their third or fourth litters because of breeding difficulties.



Even the young piglets are hardy enough to roam outdoors in the winter



Even in winter, the sows manage to find something to forage in their extensive paddocks

At farrowing, the sows are housed individually in pens. The piglets have a separated area which provides them with protection and supplementary feed. The pens also have rails for added protection.

There is no need to clip the piglets' teeth because the litter size is close to the natural number for a pig and there is no competition for the sow's udder. The piglet's tails do not have to be docked because they live in a very enriched environment where tail-biting would be highly unlikely.

The piglets are weaned at 30 days. This may have to be increased to 40 days to comply with EU organic legislation. The advantage of later weaning is that the piglets are more able to cope with the stress of losing their mothers and having a change in diet and environment imposed upon them. Early weaning can increase susceptibility to disease. After weaning the piglets have access to the paddocks and also have 10 hectares of orchard where they can forage for fruit.

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The large barn provides protection from both the weather and predators – but they still choose to venture out

Organic rare breed pig production system	
Date of visit	25 November 2003
Certification scheme	OMMI (National Institution on Agricultural Quality Assurance) and Biokontroll Hungaria (organic)
Number of sows	50
Breed	Mangalica
Food	Corn and fodder
Average and maximum farrowings per sow	Max 5
Farrowings per year	2
% piglets stillborn	<1%
% live born piglet mortality	<10%
Average number of piglets weaned per farrowing	6 (6 or 7 born per litter)
Mutilations	Castration. No teeth-clipping or tail-docking
Weaning age	30 days
Growth rate	450g per day
Food conversion rate	5:1
Weight when sold on or slaughtered	140-150kg
Transport to slaughter	185km
Price to farmer	Premium paid for Mangalica meat
Market	Premium quality hams locally and to Spain and Italy
Number of stockpersons	3
Number of inspections	At least daily
Health problems	None reported
Other welfare issues identified	Mutilations (castration). Weaning age