



FREE-RANGE PIG HUSBANDRY SYSTEMS

CASE STUDY FARM_NO_01

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Picture 1. Free-roaming grower pigs. Foto: B. Blomstrand

History of the farm

The farm_NO_01 is located in the south-eastern part of Norway, a region characterised by a humid continental climate with cold, snowy winters and mild, green summers. The region receives steady precipitation throughout the year, supporting lush forests and vibrant vegetation, especially during the warmer months. Thanks to its fertile surroundings and ample rainfall, the landscape is especially verdant and scenic during late spring and summer.

The farm has been operated organically since 2003 by the farmer, with the help of both seasonal and permanent employees. Covering 27.4 hectares of fully cultivated land, the farm raises beef cattle and horses in addition to pigs. Furthermore, the farmer grows carrots, broccoli, wheat, slash-and-burn rye, and fully cultivated grassland. After harvesting, pigs are allowed to graze these areas, making use of leftovers from crop production as feed.

Animal welfare in conjunction with product quality and economic sustainability are the highest priorities for the farmer.

Pig rearing

One week prior to farrowing, pregnant sows are isolated in separate insulated farrowing huts with straw bedding and access to an outdoor area of approximately 10 m². The farrowing area is opened to the surroundings one week after farrowing, allowing the sow and piglets to mingle with other like-minded. Late weaning and natural rearing of the piglets are important to the farmer, with high focus on good health and high animal welfare.

After weaning, the piglets are moved to an area with other grower pigs, where each grower pig has access to more than 200 m² of area. The growers have insulated straw-filled huts, which are moved as needed, normally 3-4 times

during the winter and less frequently in summer. Retired sows are kept as “aunts” among the grower pigs to help stabilise the flock and reduce conflict levels. Breeding sows are kept with boars for mating purposes.

All pigs are kept outdoors year-round on arable land (not in the forest) to ensure optimal use of their manure as fertiliser. Additionally, all pigs have access to insulated huts with straw. The insulation helps minimising condensation inside the huts during winter and keeps the temperature down during summer. The huts maintain a comfortable temperature for the pigs even during cold winters.

The animals are fenced with a single electric fence consisting of two wires. In case of wild boars roaming the area, the farmer installs a second fence to prevent direct contact between wild boars and domesticated pigs.

Environmental aspects

To avoid runoff into watercourses and pollution from manure, a 6-meter vegetation buffer is maintained between the pig pastures and the watercourses. In erosion-prone areas, a double fence is used. Pigs do not have access to the watercourses.

Market

The most challenging aspect of being an organic farmer is marketing and selling the products according to the farmer. This farmer is marketing his products through Gartnerhallen (a producers’ organisation), Bama (a wholesaler), and Kolonihagen (a marketing company of organic products).

Antiparasitic treatment and vaccinations

The farmer receives feedback from the abattoir indicating that parasite-related pathological changes have been observed in the liver of animals (“milk spots”). Therefore, he routinely treats all grower pigs with antiparasitic drugs (fenbendazole) twice, at 5 and 11 weeks of age.

Furthermore, all animals follow the standard vaccination protocols against swine erysipelas, coli, and parvo.



Picture 2. Sow with piglets in the farrowing area. Photo: B. Blomstrand

Health and welfare

According to the farmer, health issues are generally rare. However, challenges with leg health have been observed in sows with 50% Duroc genetics. Therefore, he aims to breed sows with a lower proportion of Duroc, although this can be challenging when he aims to self-recruit new breeding sows.

Self-reproducing and -farrowing sows are important to the farmer, in addition with animals that exhibit good mental health. He considers the welfare of free-roaming pigs on his farm as good with highly stable and mentally balanced animals, being notably tame.



Picture 3. Sow with piglets in early spring. Photo: K. Sørheim

Table 1. Farm statistics

Farm category	Information
Breed	TN70/Yorkshire/Hampshire sows × Duroc boar
Number of sows	50
No. slaughtered animals per year (2023)	800
Full-time equivalent	8
Other species	Beef cattle, horses
Feed	Free access to concentrate, roughage, and pasture
Average annual farrowings per sow	2
Mutilations	Very few to none
General health	Good
Weaning age	>6 weeks
Slaughter weight	Depending on customer: 85-95 kg or 115-125 kg
Area per grower pig	>200 m ²

This fact sheet is developed as a deliverable in the Roam-FREE project, <https://projects.au.dk/coreorganicofund/2021-call-projects/default-title>. The author acknowledges the financial support for this project provided by funding bodies, partners of the H2020 ERA-NET CORE Organic Co-fund, under the 2021 Call.

