

Sheepdrove Organic Farm – Monitoring, Research & Development

Funder: Sheepdrove Trust, Sheepdrove Organic Farm & others.
Lead Organisation: IOR- EFRC
Start Date & Duration: 2002 - On going.

Background.

The overall goal of Peter and Juliet Kindersley (the owners of Sheepdrove Organic Farm) for Research and Development work at Sheepdrove is to establish an effective programme that will further the evolution of SOF towards an organic farming system that is truly sustainable; is in line with the highest principles of animal welfare, where production and ethological principles are complementary; conserves and enhances biodiversity in all its forms; produces food that accords to Elm Farm Research Centre's (EFRC) comprehensive definition of food quality; and is businesslike and commercially minded.

Progress to date.

Elm Farm Research Centre was commissioned by Sheepdrove Organic Farm (SOF) to take the lead in developing and co-ordinating an R&D and demonstration programme on Sheepdrove Organic Farm.

An audit of current enterprises and activities was undertaken in conjunction with the SOF team. It found that little substantial R&D and demonstration work had been completed on SOF. However, a number of activities have been initiated in an *ad hoc* way and could be built on in the future.

It was proposed that the research and development programme on SOF would have the following aims:

- Further the evolution of SOF towards an organic farming system that is truly sustainable; is in line with the highest principles of animal welfare, where production and ethological principles are complementary; conserves and enhances biodiversity in all its forms; produces food that accords to EFRC's comprehensive definition of food quality; and is businesslike and commercially minded.
- Provide information to enable the "Sheepdrove story" to be recorded and told for consumer information and general education purposes.
- Contribute to the organic research programme of the organic movement and organic sector in the UK.

The programme consists of:

A comprehensive monitoring programme of all aspects of SOF including:

- Monitoring of the including the beef, sheep, pig, poultry, arable and forage production systems.
- Monitoring of the environmental on SOF including soils, water quality, aquatic invertebrates and vegetation, terrestrial invertebrates and vegetation, butterflies and moths, birds and weather.

A range of specific projects have and are being undertaken on SOF in line with the overall goals of the programme.

- The Sheepdrove estate.
 - The production, implementation and continuing development of a whole farm plan for Sheepdrove Organic Farm.
- Poultry.
 - Design, development and implementation of an organic silvo-poultry system for Sheepdrove organic farm.
 - Production of growth curves for the table birds in the organic silvo-poultry system on Sheepdrove organic farm.
 - The best breed of chicken for the SOF silvo-poultry system.
 - The use of 100% organic feed on the SOF silvo-poultry system.
 - Free range poultry behaviour - desk study.
 - Poultry nutrition - desk study.
 - Poultry gut development desk study.
 - Environmental monitoring of the organic silvo-poultry production system on the Sheepdrove Organic.
- Livestock.
 - The design and implementation of a radial production system for pigs on Sheepdrove Organic Farm.
 - The design of cattle winter housing for Sheepdrove Organic Farm.
- Cereals.
 - Organic varieties and mixtures.
 - Generating & evaluating a novel genetic resource in wheat in diverse environments – AR0914.
 - Advanced automation technologies for sustainable agricultural production – LK0928.
 - The incorporation of important traits underlying sustainable development of the oat crop through combining 'conventional' phenotypic selection with molecular marker technologies ('OatLink') – LK0954.
- Environment.
 - Lowland Catchments Region - LOCAR. This work includes producing a water budget for the farm/Lambourn catchment.
 - Development of energy budgets for individual enterprises – leading towards a whole farm energy budget.

Expected benefits.

The benefits should be threefold, as are the objectives.

- The evaluation and research within the SOF system will assist and drive the evolution of SOF towards an organic farming system that is truly sustainable; is in line with the highest principles of animal welfare, where production and ethological principles are complementary; conserves and enhances biodiversity in all its forms; produces food that accords to EFRC's comprehensive definition of food quality; and is businesslike and commercially minded.
- By using the research findings it will be possible for all areas of SOF (from the farm through processing, sales and the education) to tell the "Sheepdrove story". This will allow for information to be recorded and told for consumer information and general education purposes.
- Much of the work that is being undertaken on SOF is providing data and information that is of a high scientific standard and new to science. Work with others EFRC will exploit this to ensure that the information is disseminated to appropriate parties but to also develop further research activities and to attract additional research funding.