

***Project Title:***

Sheepdrove Organic Farm Research and Development. Farm Monitoring – Environment



***Short Title:*** Sheepdrove Organic Farm Monitoring - Environment

***Project Code:*** SOF059 – SOF066

***Project Leader:*** Claire Aspray

***Project Partners:*** Sheepdrove Organic Farm

***Start Date:*** 2003

***End Date:*** Ongoing

***Funder:*** Sheepdrove Trust

***Key Words:*** Sheepdrove Organic Farm, SOF, Environment, Biodiversity

***EFRC Programme:*** EFRC-SOF Research and Development

***Abstract of Research:*** The EFRC-SOF Research and Development programme started in June 2002 and led to the establishment of the Farm Monitoring programme in early 2003. The programme consists of three key areas, Enterprises, Soils and Environment. The initial priority within all three areas was to gather information in order to establish a comprehensive baseline data set to compare future annual results with. The 2003/2004 seasons baseline will act as a point of reference enabling each annual performance to be compared to a SOF benchmark as well as against other organic farms.

The 2005 programme will develop and build on what has been undertaken and reported on in the last 2 years.

The environmental monitoring at Sheepdrove is a very ambitious and comprehensive programme, a range of environmental monitoring exercises were undertaken during 2004 including:

- Monitoring of the Compact Vertical Flow Reed Bed System (CVFRBS) – Water Quality and Aquatic Invertebrate and Vegetation Surveys, in conjunction with

Wildfowl and Wetlands Trust ([www.wwt.org.uk](http://www.wwt.org.uk)) and Watercourse Systems (weedon@compuserve.com)

- Lepidoptera Surveys
- Bird Surveys
- Terrestrial Invertebrate and Flora Surveys
- Agroforestry Monitoring, vegetation, invertebrates, soils
- Weather

The sampling transects (see Figure 1 below) were established around the farming system in order for EFRC to be able to link the data with the land use and rotation. The 7 transects cover an area of ancient woodland (Nutwood, NW), newly planted woodland (Melvilles Trees, MT), permanent pasture (The Rough, R), an area of land converted back to permanent pasture (Hundred Acres, HA) and three transects, A, B and C, which incorporate all the various stages of the rotation.

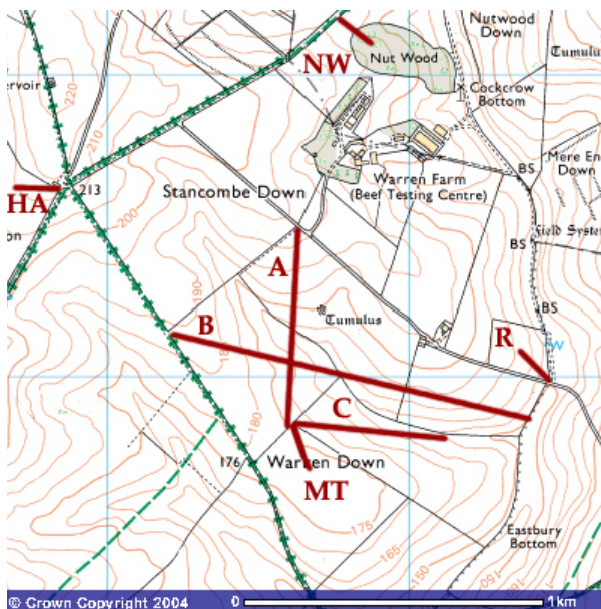


Figure 1. Sites of environmental monitoring transects on Sheepdrove Organic Farm

This programme will continue throughout 2005.

**Expected Benefits:** A continuation of the existing projects will enable EFRC to compile a comprehensive data set on the environment and biodiversity at SOF year on year. This will allow us to monitor the effect of the farming system on the environment as well as to highlight any annual variations, rare or endangered species within SOF, possible problem areas.

**Output:**

- Sheepdrove Organic Farm, Whole Farm Plan. A Discussion Document. March 2004
- Treatment of abattoir effluent using a compact vertical flow reed bed system. November 2004

- Project: SOF 022 (2004) Moths. Final Report. December 2004
- The Sheepdrove Organic Farm 2004 Bird Survey by The RSPB Volunteer and Farm Alliance. December 2004
- Monitoring of Butterfly Species at Sheepdrove Organic Farm April – September 2003. January 2004