Leading the transformation of the UK food system from the Midlands





Martin Williams

MW Farming

MW Farming is applying a wide and innovative array of options and measures to improve water quality, promote habitat and prevent soil erosion on their arable farm.

The Farm has received support from the Severn Trent Environmental Protection Scheme grant, the Environment Agency and the Wye and Usk Foundation to instrument these systems.

MW Farming's commitment to look after and improve their environment is shown through their implementation of more than 11 mid and higher tier Countryside Stewardship Scheme measures. This has included planting vegetated margins around and along all of their fields and watercourses on cultivated land to alleviate run-off and erosion, sediment traps to filter water before it reaches the river and tree, and hedge planting.

The Farm also employs calculated measures, such as a whole farm nutrient budget, which gauges the balance of estimated uptake of nutrients by the crop, compared to nutrients taken into the soil. Soil testing and soil organic matter testing help MW Farming avoid applying Phosphorous to high index soils and an on-farm weather station helps plan when applications are most viable.

Alongside conventional cereal crops, the farm grows early maturing varieties of maize to avoid wet autumn weather and the related soil damage, alongside grass under sown in the maize to establish a green cover and reduce the risk of soil erosion.

Soil erosion has been further reduced in numerous ways by MW Farming, including through the input of crushed stone livestock trails and the use of minimal tillage to improve soil structure and control soil erosion, including with precision technology to reduce track drifts and allow precision fertiliser application which further reduces run-off.

The farm protects its soil through cover crops to reduce risky bare soils and reduces compaction in arable soils through the use of low floatation tyres on the grain tailer and combine. Grassland subsoiling is also ensured to help distribute vehicle weight and further reduce soil compaction.

To promote habitat, arable reversion has been carried out on parcels of land at the farm. This requires reverting cultivated land to natural habitat, such as wet grassland which is grazed by sheep that are brought in from other farms.

Poultry litter is used on land where it is needed, rather than bio-solids, to reduce the farm's run-off while waste from the cattle sheds is used as organic manure. The farm has a spray shed and concrete flooring to reduce run-off after crop protection products have been applied.

