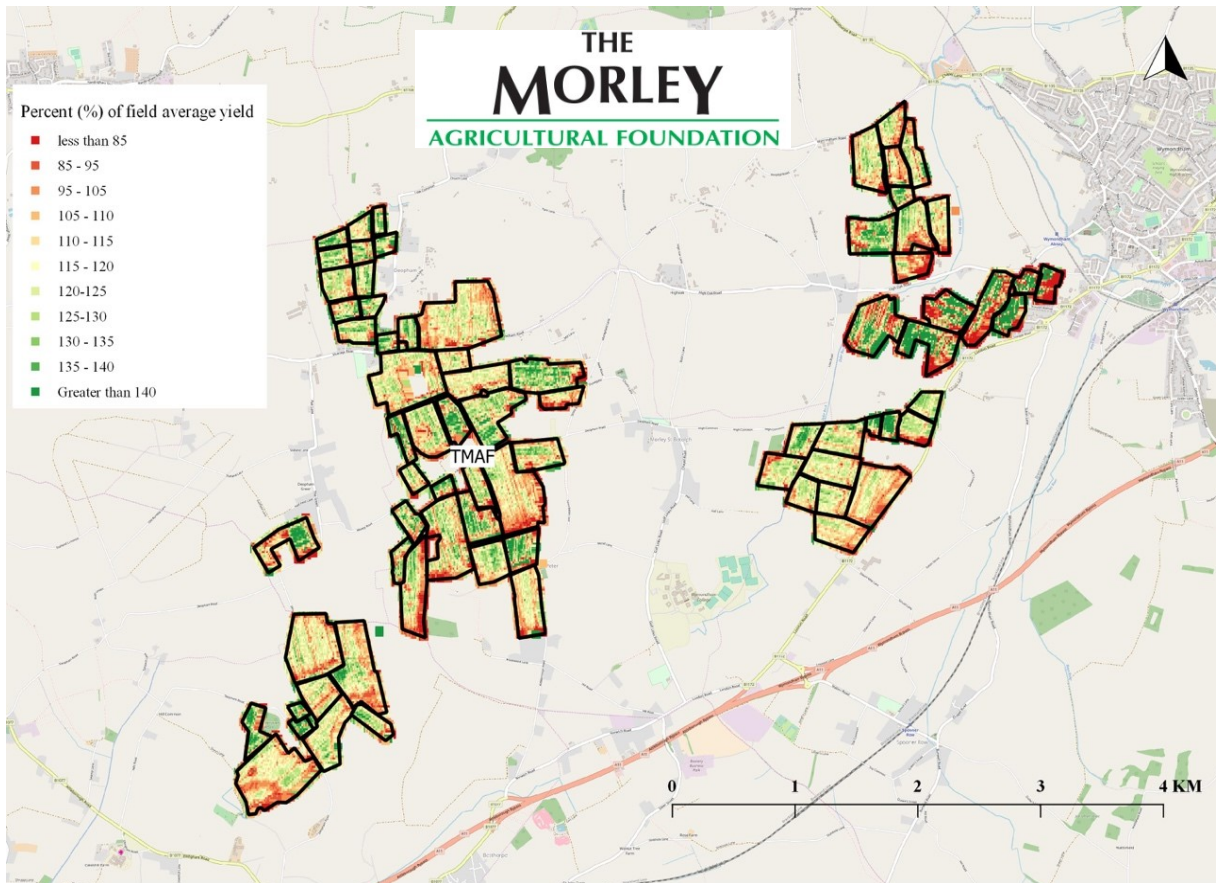


Morley Soil and Agronomic Monitoring Study Sites Sets

Morley SAMS



Morley SAMStudy

Aims to link soil health to impacts on crop yield, profitability and resilience. This will be implemented through a programme of post-harvest soil monitoring and within season and harvest crop observation sites across the farm

Morley SAMSites

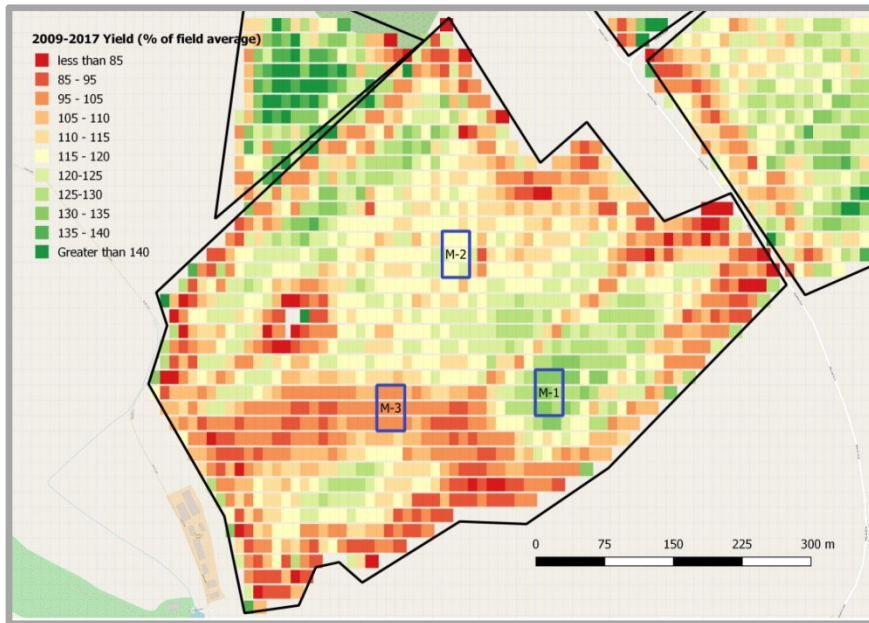
30 sites have been selected using integrated yield maps (2009-2017) to identify areas of high, low or unstable (high year to year variation) yields relative to the rest of the field. Additional sites include headlands and areas in long term grass due to return to arable cropping

Morley SAMSets

A long term **data set** for soil physical, chemical and biological properties will be generated at each site. This can then be linked to annual measures of crop productivity. Providing recorded insight into the impacts of current and future agricultural practices on soil and crop productivity.

Manns field

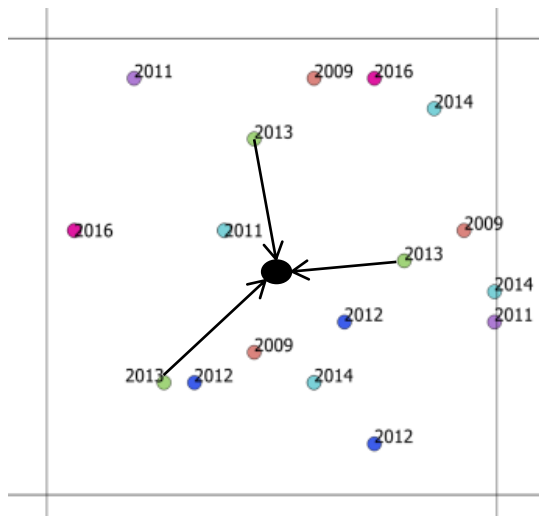
Field	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Manns	W Wheat	S Beet	S Barley	W OSR	W Wheat	W Wheat	S Beet	W Wheat	W Barley	W OSR	W Wheat



Crops highlighted grey in the rotation where excluded from analysis as they were either non combinable or had a trial over a large area of the field.

Site	Yield (% of field average)	Min	Max
M-1	130.6	126.6	132.8
M-2	118.6	117.2	120.7
M-3	99.6	96.2	104.3

The three SAMsites in Manns field are split between the high, medium and low performing areas of the field



Each field was split into rectangular grids (aprx 225m²). For each year a mean yield for that grid was calculated. This was then converted to % of field average yield for that crop to standardise yields regardless of crop. Finally the mean value for all years was obtained for each grid square to provide a multi year-multi crop yield performance map.

