Profiting from Reducing Tillage and Lowering Emissions

Case Study 3

John Muir— Freelands Farm

Freelands Farm has been in John's family since the early 1900's and John himself has been farming there since 1983. At 220 acres it's a compact unit and serviced by just the one tractor so it was important that John adopted a crop establishment system that would not only be efficient but also deliver on his aspirations for soil management. Prior to investment in a strip-till drill the land was always ploughed and so today the winter wheat, winter barley and winter beans are all established without soil inversion.

John is the first to admit that for him the emphasis has to be on patience and waiting until ground conditions are suitable so that compaction issues are avoided. The soils are medium to late loams and, although fertile, need to be managed according to seasonal rainfall values. Endrigs and any other consolidated areas are lifted as and when required . Straw is baled off the farm but organic matter lost is replaced in a 'straw for muck' agreement and the muck tends to get spread shortly ahead of drilling and incorporated lightly with the Terrastar before the crop is sown. Any firming required is dealt with a pass of the rolls. It's a system that seems to work well in that the wider row spacing of the Claydon avoids any potential blockages arising from surface applied manure.

Delaying drilling until beyond the end of September is usually successful in achieving enough time for an early weed chit having encouraged germination with a pass of the Terrastar and it's a practice that works particularly well in the spring too.

Cumulatively the strip tillage system has reduced John's carbon footprint; less carbon loss as a result of reduced soil movement, and fuel usage has halved. Cover crops bring further organic matter into the soil's biology sequestering more carbon.

Despite a leap of faith to his new system John has no regrets, but firmly holds the mantra 'wait until conditions are right'.