

Event Report 31: Foliar Fertiliser With Tow & Fert

Date of Event: Thursday 9th October 2025

Host: Rob and Liz Priest, Scadghill Farm, Bude

The use of conventional nitrogen fertiliser has several environmental risks associated with it. An alternative is to use foliar fertilisers – liquid fertiliser applied directly to plant leaves. To understand more about the use of foliar fertiliser, a group of farmers met at Scadghill Farm, Bude to hear from [TerraFarmer](#) about the [Tow & Fert](#) system. This event was made possible with thanks to the [National Lottery Community Fund](#) who fund the [Farm Net Zero project](#).

We started the event with a comparison of conventional solid fertilisers and liquid foliar fertilisers. Rob Purdew from Farm Carbon Toolkit outlined the risks of conventional fertiliser such as leaching into watercourses, acidification of soil, poor nutrient use efficiency and greenhouse gas emissions from the fertiliser's manufacture and volatilisation on ground contact.

In comparison, as foliar fertiliser is applied directly onto the plant's leaves in liquid form, many of these risks are reduced. In particular, nutrient use efficiency can be improved as the fertiliser is applied directly to leaves and can be taken up quicker than soil-applied fertiliser. Improved nutrient use efficiency can in turn mean reduced quantities of fertiliser are needed, saving input costs as well as reducing greenhouse gas emissions.

Scadghill Farm is a 220 acre suckler beef and sheep farm on the north Cornish coast, run by Rob and Liz Priest since 2021 as part of their larger organic farming business. Scadghill was farmed conventionally prior to the Priests and on conversion to organic, Rob and Liz felt that the soil performance and biology required improvement, so they consulted Tom Tolputt from TerraFarmer.

Tom worked with Rob and Liz to assess soil nutrient levels and create a foliar fertiliser mix to address deficiencies and boost soil biology. The mix for Scadghill included organically certified fish hydrolysate and molasses, with the aim to create a "balanced diet" for soil microbiology.

TerraFarmer's field operative Matt Vellacott demonstrated the Tow & Fert machine used to apply the foliar fertiliser. These trailed machines come in different tank sizes with the example shown at this meeting the smallest option. This comes with its own petrol engine so it can be towed behind vehicles without a PTO.



Matt explained that the tank comes complete with an agitator to allow mixing the fertiliser within the machine. However, for ease and to speed refilling, many farmers mix in a separate tank and decant into the sprayer. Depending on application rates, the model demonstrated at this meeting can cover up to 4 hectares in half an hour. Matt and Tom concede that foliar applications are slower than conventional fertiliser spinners but emphasise that the productivity benefits outweigh this.

Key Takeaways:

- Foliar fertiliser can improve the efficiency of nutrient uptake by plants.
- There can be emissions reductions by using foliar fertiliser instead of solid fertiliser.