## Upper Nisbet climate change focus farm meeting



Farmer discussion group meeting held at Upper Nisbet on Tuesday 13<sup>th</sup> December 2011 at 13.30.

**Meeting theme** – Improving farm profitability; looking after the basics.

The aim of the meeting was to look at improving farm profitability through better use of nutrients; whether this was through a paper based nutrient budget using <u>SAC technical notes</u>, DEFRA <u>RB209</u> Fertiliser Manual, computer programs such as <u>PLANET Scotland</u>, or taking a more high-tech approach and going into precision farming, as farmers Robert and Jac Neill are considering for Upper Nisbet. The meeting was held in the workshop at Upper Nisbet and facilitated by SACs Moira Gallagher.

The meeting began with an overview from Moira to welcome everyone to Upper Nisbet and set the scene. Following this, Andy Hindhaugh from McCreath, Simpson and Prentice and the farm's agronomist explained the current approach to nutrient management at Upper Nisbet. Andy said that when the Neills first took over the farm 11 years ago, it took time to know what they were working with, not just pH, P & K but also the capability of the soils. Upper Nisbet soils are predominantly sandy silty loams which are prone to blowing when dry and slumping and run-off after heavy rain. This brought its own issues with trace elements and surface pans.

With the remedial action the farm has taken, particularly regular liming, the introduction of grass/clover leys into the rotation and significant quantities of cattle FYM available, the farm now applies no bagged P&K fertiliser in the autumn.

Following Andy, Aidan Monaghan from SOYL spoke about the soil testing results obtained from Upper Nisbet. Soil samples were taken across the farm and using GPS technology, the variation in nutrients at field level could be indentified. Following analysis, SOYL were able to put together a nutrient map of the individual fields at Upper Nisbet, showing areas within individual fields that had high, moderate or low nutrient and pH status. Using this technique, Aidan could establish that just over a third of samples were deficient in P and K and where these areas were within individual fields. This can be especially useful for problem areas around the farm. One field in particular showed a lack of P and K; Robert confirmed that this field was indeed harder to get dung to, so consequently dung wasn't spread there as often.

Some of the soil maps revealed pH high spots; these could be due to areas where lime was tipped. One farmer commented that soil analyses, especially for pH was something that he wouldn't now go without.

Once fields have been analysed for P, K and pH using the GPS technique, fields could be zoned into 24m² areas and fertiliser applied at a rate suitable for that particular patch of the field. Aidan said that once you have map data and know nutrient levels, you can work through what the cropping is going to be and therefore target nutrients accordingly. Its important to account for nutrients in dung, as these can form a significant nutrient contribution to soils and crop yield that doesn't need to come from bagged fertiliser.

Rod Armour from Trimble UK gave the group an overview about the range of GPS kit that could enable variable rate fertiliser applications, looking at some of the more technical aspects and models available on the market ranging from hand held units to kit with N sensors. Rod noted that there wasn't really a farm size threshold for investing in GPS kit, but did note that the more accurate you can be, the more savings you would be likely to achieve.

Information can now be transmitted direct from the office into the tractor; so scope for data transfer is important. In terms of deciding what unit to go for, Rod admitted there was a lot to consider. In his opinion, its worthwhile looking at where you want to be in 5 or so year's time and making sure the kit you choose would support that.

The final slot at the meeting covered PLANET Scotland, a free nutrient management programme aimed at farmers. This is useful for those that want to begin to look at their nutrient use on farm but are not quite ready to go down the GPS/precision farming road. Moira used data from Upper Nisbet in the programme to demonstrate the steps that were needed to get to produce the farm report, and also highlighted that this would provide a component of the NVZ action programme requirements. PLANET can also help you to tweak nutrient recommendations; its worth checking to see if you have been adding more nutrients than required. Moira also noted that there was good support for farmers wanting to use this program; you can download your field data via Rural Payments Online and there is a telephone helpdesk facility that can talk you through any data input issues. In summary this is a useful way to generate your NVZ plan and identify nutrient requirements. As is often the case, the more you put in to this, the better result you will get out.

Speakers from this meeting also recorded a podcast. You can download the podcast at www.sac.ac.uk/climatechange/farmingforabetterclimate/ccfocusfarms/ccarable/

## Do you farm and would you like to attend to future meetings?

The meetings provide sensible ideas for the farm business, from invited speakers and other farmers, to improve efficiency whilst reducing the loss of greenhouse gases. It's free to come along and you will be able to influence future topics, speakers and location of meetings.

Working with farmers Robert and Jac Neill, SAC's Moira Gallagher helps organise the programme of meetings over the year. For details of the next event at Upper Nisbet, you can contact Moira at the SAC St Boswells Office on 01835 823322 or email <a href="moira.gallagher@sac.co.uk">moira.gallagher@sac.co.uk</a>

If you want to keep up to speed with what's happening at Upper Nisbet but don't want to attend farm meetings, ask to be added to the Upper Nisbet email list; you will receive notification of future events and meeting notes. You can also follow us on Twitter @SACFarm4Climate

Visit the website at www.farmingforabetterclimate.org or email a general enquiry to climatechange@sac.co.uk

