



Ken Bowler, GrowHow  
Marketing Manager

## Fertiliser prices stabilise

**“NPK prices are not far off half what they were at this time last year and prices have generally stabilised,” says GrowHow’s Marketing Manager Ken Bowler.**

“After 2008’s extreme volatility we are seeing a more normal market for Nitrogen and Phosphate and we have finally seen Potash prices responding to the global decline in demand. Potash is now trading at a more realistic level of around \$500/t; 50% lower than the highs of 2008/09,” he says.

With prices at more sensible levels and low stocks on farm, the prediction is that demand for N, P & K is likely to pick up.

The British Survey of Fertiliser Practice (see page 3) highlights a huge drop in the use of P & K in the 2007/08 season. P & K holidays have continued in 2008/09 with AIC data showing a 40% drop in compound fertiliser deliveries. This is not just a UK phenomenon, a similar picture is emerging across Europe.

Without an adequate investment in P & K, farmers may not be able to realise

the full benefits of their N applications. Ken continues, “Short P & K ‘holidays’ are fine as long as you know you have reserves in the soil, but for many people it’s time for the holiday season to end so that maintenance dressing can be applied and, where necessary, soil indices can begin to be rebuilt.”

Turning to the Nitrogen market, fortunately last year’s spectre of ever rising prices is past.

“We are experiencing a more normal season. Prices announced to date have been significantly below the highs of late 2008 with every prospect of month by month increases rewarding those who wish to buy early. Detailed prices are not available beyond late October. However, market expectations are that by early spring Ammonium Nitrate will be on-farm in the low £200s.



Regular *Farmers Weekly* contributor and twice a Cereals host, Andrew Ward, is working closely with GrowHow to put the company’s Nitrogen management system, N-Min® & N-Calc, through its paces. Andrew manages the 650ha all-arable Roy Ward (Farms) business near Leadenham in Lincolnshire. He is pictured (left) in one of the spring barley trials with GrowHow Adviser Dave Towse. Crop samples are being weighed before combining. The information will be used to provide crop balance data. Full details of the results will be published in View/View Update. Make sure you get your copies by signing up online at [www.growhow.co.uk/view](http://www.growhow.co.uk/view)



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# Timing is Key

GrowHow's R & D programme has some exciting advice for winter barley and oilseed rape growers. In both crops the independent trials conducted by ADAS, show that changing fertiliser timings improves yields.



Allison Grundy,  
GrowHow Company Agronomist



Dr Pete Berry,  
ADAS Principle Research Scientist

## Go early in winter barley

"We've just had the preliminary results from Year 2 of a three-year research project into winter barley and the good news is that the findings from 2008/09's harvest are in line with Year 1 results," says Allison Grundy. "At both Rosemaund in Herefordshire and High Mowthorpe in Yorkshire early applications of Nitrogen have produced an average yield improvement of 0.5 t/ha; the same increase that we saw in the 2007/08 trials. Now that we have two years clearly demonstrating the benefits of early N applications I think we can confidently start to change the advice we give to farmers."

Looking at the physiology of barley, applying N early makes sense. In barley it is the grains/metre<sup>2</sup> which account for most of the yield. So to increase yield, the plant must be encouraged to grow as many ears as possible. Applying N early promotes tillering.

Dr Pete Berry of ADAS is leading the research. "We are using the two-row variety Saffron and the six-row barley Pelican to compare early N applications (50% in late February/early March followed three to four weeks later by 50% at GS 30) with later applications broadly following the RB209 timings (50% in mid/late March and 50% two to three weeks later). Overall the early regime results in around 0.5 t/ha extra yield.

In Year 1 the two-row and six-row varieties had a similar response but this year at High Mowthorpe the six-row responded even more positively – 1.3 t/ha more yield at the optimum N rate simply by applying the first split early.

Response curve work has also shown that the RB209 N rates for barley are significantly understated.

For High Mowthorpe RB209 recommends a maximum of 200 kg N/ha. In these trials the economic optimum at a breakeven ratio of 5:1 was 253 kg N/ha and at 3:1, it was 273 kg N/ha (3.1 is the ratio used in RB209).



The positive effect at High Mowthorpe of early N (left) with more tillers and ears clearly visible than in the crop which received N at RB209 timings.

## In brief

### Grass farmer needed

Dairy farmers based in the SW who would like to take advantage of expert technical advice to help improve their grassland productivity can apply to become the next project farm for the Grassright Group.

Interested? Then call in and see GrowHow at the South West Dairy Show on Wednesday October 7.

For more information about the Grassright initiative go to [www.grassright.co.uk](http://www.grassright.co.uk)

## Be prepared to delay N in oilseed rape

Three years of ADAS trials in OSR (2005-2008) proved that managing N to achieve a Green Area Index of 3.5 by flowering increases yields by up to 0.36 t/ha. The biggest yield increases come from delaying N applications in situations where the crop would have produced an over-large and lodging-prone canopy. A smaller canopy enables more light to penetrate so it increases photosynthesis and produces more seeds per pod and more seeds per m<sup>2</sup>.

RB209 advice is to apply N in two splits, the first in late February/early March and the second at the end of March/early April. However, this research shows that the temptation to go too early must be resisted. In general under the managed approach the first split of fertiliser was applied at the second conventional timing at the start of stem extension.

In 2008/09 the research was extended to look at the hybrid Excalibur and one of the new semi-dwarf varieties PR45D03. The results still need to be fully analysed but there was certainly no yield penalty from the managed approach. It also looks as if the target canopy size of 3.5 is appropriate and there was no difference in optimum N rates.



Elaine Jewkes,  
GrowHow Grassland Specialist

# Don't switch off to what your grass needs

Many grass farmers have moved away from compounds to straight N in recent years but are such nutrient cuts justified or are farmers mortgaging the future? GrowHow's grassland specialist looks at the pros and cons of PK 'holidays'.

The amount of P & K applied to grassland in Great Britain fell by 28% in 2008 compared to 2007, continuing the downward trend of recent years. The fact that many grassland farmers have cutback is not surprising. The effect of very high fertiliser prices worldwide in 2008 has seen dramatic falls in use across the globe. Of course, in the right circumstances this is not necessarily a bad thing. Most livestock farmers have a valuable source of P & K in the slurry lagoon or tank. Used wisely this can reduce the need for fertiliser P & K.

But before embarking on that PK holiday it is essential to have an understanding of the soil status. Soil testing is the cornerstone for every nutrient plan. If you know that your indices are at or above the required level – that is Index 2 for P and Index 2 for K –

taking a PK holiday will do little harm particularly on grazing ground. However for high offtake crops such as silage, particularly when multiple cuts are taken, fertiliser P & K will still be needed.

Amongst other things P is vital for root development, whilst K is important for efficient N use by the plant and for the ability of the plant to withstand dry conditions. In either case, a lack of P & K will impact on yield. Yield impacts start immediately when the soil falls below the required index. Potash Development Association data show a 13% drop in silage yield over two cuts at index 1, relative to grass adequately supplied with K. This increases to 25% in the second year and rises to 53% by the fourth year. This lost yield is feed which will have to be replaced if

animal performance is not to be compromised.

The problem is that once indices fall below target values the rates that have to be applied to bring them back up are much higher than maintenance dressings and they have to be made over several years.

It is easier than you may think to deplete soil reserves. Where two or more silage cuts are taken, the soil can drop from P index 2 to index 1 in a year. Taking a P or K holiday without careful management could become the financial equivalent of a Caribbean cruise when what you really needed was a weekend break. The short term gain may be nice but longer term the costs will escalate. It is far cheaper to maintain than to rebuild.



## See us at the Dairy Event

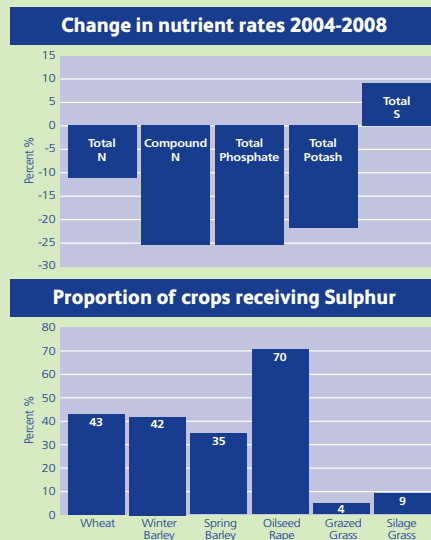
Does your grassland get all of the nutrients it needs to get reliable yields year-on-year? Come and chat to GrowHow's Grassland team at the Dairy Event, 16 -17 September, sample some of Britain's tastiest cheeses and use your skill to identify the different fertilisers on display to enter our free competition for your chance to win a 32" LCD TV. See us on stand CS3-559



## Fertiliser usage trends

The British Survey of Fertiliser Practice is the benchmark for changes in fertiliser use in England, Scotland and Wales, explains GrowHow's David Beck. The latest figures reported are from the 2007/08 season. Agricultural Industry Confederation (AIC) data for 1 July 2008 to 30 June 2009 show compound deliveries fell by 40%. Overall nutrient rates are higher on arable land than grassland, but despite this, it is grassland that has seen the biggest usage reductions.

The N, P, K trends are the most commonly reported, but a closer look at less well publicised data is equally informative. Sulphur has shown a steady increase in recent years, indeed as can be seen from the graph top right it is the only nutrient that has increased in use over the last five years. Whilst the benefits from Sulphur in grassland continue to be enjoyed by only a few, those grassland farmers who have discovered it are applying an average of 33kg/ha SO<sub>3</sub>; that's more nutrient per ha than is currently being applied as Phosphate or Potash!



Keep up-to-date with the latest news at  
[www.growhow.co.uk/view](http://www.growhow.co.uk/view)

## Your View

Two farmers from the Sigma Group, James Chamberlain and Innes McEwan have had impressive OSR results by following GrowHow Adviser Tom Land's advice on nutrient management. Tom used the company's N-Min & N-Calc to develop field-specific recommendations.

### N-Min gave £189/ha

James Chamberlain wanted to compare the N-Min & N-Calc recommendation with his own farm practice. N-Min & N-Calc recommended just 77 kg N/ha be applied whereas normal farm practice was 160 kg N/ha. The N-Min crop yielded 4.6 t/ha, 0.5 t/ha more than the normal farm practice field – a saving/profit gain of £189/ha.

Over in Berkshire, Innes McEwan's crop in the field chosen to trial N-Min & N-Calc had a large Green Area Index and a high SMN so only 28 kg N/ha was applied. The resulting yield was also 4.6 t/ha. Profitability was improved by only applying the N that the crop needed and because the crop went off so evenly there was no need to desiccate.

Sigma is a collaborative venture looking at ways to improve the performance of oilseed rape crops. The team is a group of key farmers and industry professionals including experts from GrowHow, Syngenta, NK Seeds and ADAS with Farmers Weekly as the media partner.

## Grassright farmer shortlisted

Richard Corlett, who farms at Lathom near Ormskirk, has been named as one of the five finalists in the *Farmers Guardian's Dairy Farmer of the Future* competition.

Richard is one of the farmers benefiting from the expertise of the Grassright Group, a collaboration of four companies – Dow Agrosciences, GrowHow UK, Limagrain UK and OPICO – who are working with project farmers to find practical ways to improve grassland performance.

Grassland improvement continues to be a key area for Richard. Soil testing has been used regularly for the past 15 years and P & K indices have been built so that today Richard is able to match P & K inputs to crop off-takes to maintain his indices cost effectively. Indeed all the P requirement is now obtained from slurry with just 22.5 kg/ha of bagged Potash being applied to 1st cut silage ground in 2009.

Richard works closely with his fertiliser adviser Mike Denney of Michael Denney Soil Nutrition Ltd to improve silage quality and increase the ratio of milk from grass. Together with his wife Dawn, Richard milks 160 cows, with an average yield of 9,018 litres per cow; 3,571 litres of which comes from grass.



Elaine Jewkes with dairy farmer Richard Corlett

## EnCompass developments

The NVZ Compliance module in GrowHow's nutrient management software, EnCompass, has been updated to meet the requirements of the Nitrate Prevention Regulations 2008.

"We've introduced flexibility by splitting the process into four modules to allow Advisers to produce individual reports," explains Advice Support Manager, John Scott. The system is quick for the Adviser to complete and easy for the farmer (or inspector) to see that everything is fine.

The first two modules calculate whether the farm has sufficient storage for dairy, pig or poultry slurries during the winter. The third works out the whole farm limit for livestock manures. "Where a derogation to the 170 kg N/ha whole farm limit has been granted Advisers can enter the higher figure," adds John. A final check on N max limits for individual crops is handled by the fourth module.

## Sign up for View and View Updates

Have you signed up to receive the new View Updates covering fertiliser issues?

Do you know someone who would like access to online View newsletters? They are now available free online by going to [www.growhow.co.uk/view](http://www.growhow.co.uk/view). Sign up and as soon as a new publication is available we will email you to let you know.



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