

ARABLE

Sophisticated and simple in approaches to improvements



SOLUTIONS: Clive Blacker, of Precision Decisions

CLIVE Blacker's name is synonymous with precision technology, and while he offers some of the most sophisticated products and services available he suggests a simple system which will allow every farmer to improve the accuracy of field operations, without the use of technology.

Meanwhile, his company, Precision Decisions, is preparing for the imminent launch of its new, online Satellite Assessment Tool, to identify variability across individual fields.

The constant stream of new precision solutions coming on to market can make the first steps towards implementing the technology confusing, admitted Mr Blacker. However, he is adamant that several copies of the farm map and a set of coloured crayons are all that is needed to take the first move towards exploring the potential benefits on offer.

"A farmer's knowledge of his land is paramount and that forms the basis of my system," he explained. "Individual paper maps and colour coding are used to highlight areas where variability routinely occurs



BACK TO BASICS: Soil types and depth are two of the main causes of variability in farm land and soil is the most important resource on the farm, according to Clive Blacker



KNOWLEDGE IS VITAL

Wendy Short speaks to Clive Blacker, a pioneer of precision technology who says a simple system can improve accuracy.

nological advances, soil is still the single most important resource on the farm and it is pleasing that we are starting to see a more 'back to basics' approach."

Satellite Assessment Tool for field variability (SAT)

Precision Decisions will be launching a new online tool at CropTec later this month. For a fee of just under £50 a year for the SAT assessment tool, growers will receive support to go online and mark out their farm and field boundaries, to produce two free satellite images of their land.

The program will provide data which will highlight areas of variability, for the pinpointing of areas which are likely to show the widest variation. This will allow farmers to effectively qualify variability, to produce a business case for investment in precision techniques across a range of farming inputs and operations.

The targeted assessment can be used with MiFarm, the company's mobile phone app. Users can navigate to the relevant areas within the satellite data, to guide physical soil sampling. This is claimed to be more reliable than using the standard 'W' technique.

"Historically, precision farming has mainly been aimed at cereals and combinable crops, but 60 per cent of UK farmland is down to grass, so we wanted to produce a tool that can be used across all types of land of any scale and size," said Mr Blacker. "We believe that the SAT tool is the first true entry-level precision farming application."

within fields. These would include problem pest and weed patches, soil type differentials, high and low-yielding sections and areas with poor drainage.

"This information will give a fairly accurate picture of the variability of the farm land and can be very useful for decision making. If variability is very high, it may be worth investing in on-farm precision equipment, or employing a contractor with precision capability.

"If the cost is felt to be prohibitive, the farmer himself can use precision techniques at their most basic, perhaps by splitting a field into two or three segments, using two passes with the fertiliser spreader in certain areas, or making two passes with the power harrow, where the ground tends to be knotty."

Soil type and depth are two of the main causes of variability, added Mr Blacker, whose company is based at Ship-ton-by-Beningbrough, near York.

"Farms in the Yorkshire Wolds can have deep valley bottoms with rich soils, while the hillsides tend to be chalky and less fertile, although the soil texture can be similar in both areas. On holdings in the Vale of York, it is quite common to find both sandy and clay soils in the same field.

"There is a growing trend

towards contract farming and short-term land tenancies and this has increased the need for detailed information about variability, particularly when taking on new fields."

The move towards ever-larger machinery, to save on labour and make the most of limited time windows, is working against the advances being made in precision technology, he pointed out, predicting that field operations of the future would be conducted by small-scale robots.

Precision farming had scope to significantly increase yields, by making more direct and targeted applications. Nevertheless, maintaining soils in good condition must remain at the forefront of farm-management decisions, he said.

"Larger machines are a direct cause of soil compaction and also reduce the accuracy of operation. Consider the size of a combine, for example; it has doubled in the last 20 years, while yield mapping technology has remained the same. The amount of yield data now collected has halved as a result; in direct opposition to our quest for more accurate crop-growing data.

"Therefore, we may see a swing towards more advanced mapping or robotic machines, which will both alleviate compaction and enhance accuracy. "But despite all of the tech-

LIME FOR BETTER RESULTS

We have been delivering and spreading agricultural lime, fertilisers and soil improvers to farmers and landowners in the North of England and Scotland for over 65 years.

With a modern fleet of highly technical spreaders Thompsons offer Variable Spreading of the following range of supplied products:

- * Maglime™ - fine Magnesium Lime
- * Calcium Lime
- * Fibrophos®
- * Fertiliser Screenings
- * Slag
- * All types of aggregate



THOMPSONS
OF PRUDHOE
Celebrating over 65 years in Business

Please call **Stephen Dawson on 07919 491724** if you would like a quote for spreading any of these soil improvers or e-mail the Agricultural Lime team on lime@thompsonsofprudhoe.com

Tel: 01661 832422 E-Mail: info@thompsonsofprudhoe.com

www.thompsonsofprudhoe.com **W. & M. Thompson (Quarries) Ltd**